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*PUBLIC ACCESS TO INFORMATION & ICTs*  
*PHASE II REPORT*

***Indonesia***

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Prepared for the University of Washington  
Center for Information & Society

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Final Report: August 15, 2008

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Recommended citation:

Kushchu, I. (2008). Public access to information & ICTs: Indonesia. Public Access Landscape Study final report, presented to University of Washington Center for Information & Society (CIS), Seattle.

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# 1 Extended Executive Summary

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## 1.1 Research Project Overview

This research focuses on the public access to information and communication landscapes in 24 countries, with specific focus on public libraries; to understand the information needs of underserved communities, public access to information and communication venues, and the role of ICT.

Through field research in 24 countries, conducted by local research partners, and cross-country comparative analyses based on common research design elements (see list of countries and research design overview in Appendix), the project aims to contribute to the knowledge in the field of information and ICT for development. Of particular interest and value are: the comparative look at the key venues (libraries and others), and the mix of depth of in-country knowledge with breadth of global comparison to elicit success factors and scenarios to understand how diverse populations can and do access and use ICT to improve their lives. All outputs of this research will be broadly disseminated to interested stakeholders and placed in the public domain.

This report presents the research on public access to information and communication landscape in Indonesia. During recent years, a significant effort is being made to decrease the digital divide in Indonesian society. In other words, to improve access to information in entire Indonesian society especially for the underserved people.

With support from the government, various Community Access Points (CAP) have been established in Indonesia. First in the group is Warintek (Information Technology Café) and was launched in 2001. Warintek is an effort to empower units of information, documentation, and library that is funded by the Department of Research and Technology (The Government of Indonesia). Many Warinteks have been funded by local government or by itself. When this report was written, 84 Warinteks had been opened.

Second is the Warmasif (Information Society Café) that was launched in 2005. Every Warmasif was founded by collaboration between The Department of Communication and Information (Indonesian Government), PT, Indonesian Post Office, and local governments in every city. Up to now, there are 63 Warmasif venues established and each providing 3 primary services:

- 1) e-commerce for small-to-medium businesses,
- 2) e-library for students, teachers, and all society,
- 3) e-health information for all society.

There are various underserved groups in Indonesia who would benefit directly from these venues. Some of these groups include housewives, the unemployed, those who have little or no formal education, and who have low income.



This study aims to explore existing and prospective Community Access Points (CAPs) in Indonesia and it evaluates them in terms of their potential and effectiveness to better serve the underserved. The first part of the report presents an overview and the methodology used to collect the data that makes up the core of the research. Following a general country assessment, the report offers a detailed analysis of the each of the venues chosen. In the final part are the concluding remarks and further recommendations.

## 1.2 Introduction

The government of Indonesia is well aware of how crucial the information is for development. There have been many initiatives for developing the telecommunication infrastructure in Indonesia. Thirty years ago, the government thought that, the country needed a telecommunication satellite for interconnecting different regions of Indonesia. Some similar initiatives have been done for enhancing the quality of ICT infrastructure in the country. However, the government seems more concerned about the ICT infrastructure than the content of information.

The development of communication and information technology, of course, influences the new policies of the government on information society. The government has implemented many policies regarding to the development of national information system. One of the popular initiatives was Nusantara 21. However, because of economical crises that hit the country, the project had to be cancelled in 1997.

The pressures from globalization force the government to formulate a vision toward having an information society. The government of Indonesia aims to reach to a well established information society in 2015. It pushes many initiatives to adopt ICT, including providing ICT training centers and establishment of venues for public to access to information. These initiatives are organized by the Department of Research and Technology, Department of Communication and Information, Department of National Education and local governments and The National Library of Indonesia.

State Department of Research and Technology implemented the Warintek program. Warintek is an effort to provide the people with access to scientific and technological information. The program is implemented in public libraries, in higher education, in government units of documentation and through NGOs. The Department funded the program from 2001 to 2005. After the funding from department of Research and Technology is ended, the program was taken over by the local governments and the higher education institutions.

In 2003, the government of Indonesia established the Department of Communication and Information to coordinate all initiatives towards creating an information society. The department offered many programs and regulations related to ICT adoption in Indonesia including regulations on licenses, standardization, development and enhancement of the venues for public access to information.

The department is also implementing the Warmasif program since 2005. Warmasif is a public access to information venue located at the Post Offices throughout the country. The Department of Communication and Information, PT Pos Indonesia and the local governments share the responsibility of Warmasif program. The Department is responsible for providing PCs, printers, scanners and furnishings. PT Pos Indonesia provides room and human resources for operation of the Warmasifs. The local government provides the local content. Sixty-three (63) Warmasifs were opened by 2008.

The Department is also responsible for planning and coordinating the development of digital public libraries in collaboration with National Public Library of Indonesia. More over, some local governments and higher education institutes have worked out a similar plan. The efforts for developing digital libraries are aligned with the vision towards information society in 2015.

The Freedom of Public Access to Information Law, passed in April 2008, has pushed many policies and initiatives for developing public access to information. The Department will develop Internet connection to all villages and establish media centers in provinces and districts by 2009. A media center is a venue providing free access to Internet connection and government information. It also provides an ICT training center.

### 1.3 Country Overview

Indonesia is the largest archipelago and the fourth most populous country in the world. Consisting of 5 main island (Java, Sumatra, Kalimantan, Sulawesi, and Irian Jaya) and 30 smaller archipelagos, it has a total of more than 17.000 islands. The country is divided to 33 provinces that are widely spread on 5 big islands. The Java Island is the smallest island among the 5 big islands but it has the largest population in Indonesia.

Indonesia's population is around 218 million people. Around 42 % percent of the population lives in the cities. A large proportion of the population is young. The percentage of the people between 15-64 years of age constitutes around 66 %, and the people between 0-14 years are around 29% of the population. The education is compulsory for the people between 6-15 years of age and the literacy rate is around 92%. There are differences in education, social and economic status between among the provinces. (Source: [www.datastatistik-indonesia.com/component/option.com/tabel/task/Itemid\\_165](http://www.datastatistik-indonesia.com/component/option.com/tabel/task/Itemid_165), Indonesian Statistics Data 2006).

The country became independent Indonesian Republic on August 17th, 1945 when the 349-year-long Dutch colonization ended. Indonesia has strong relations with Australia and South East Asian Countries.

The economy experienced rapid growth in 80s followed by financial crises and recessions in late 90s. After 2000, new reforms led to a controlled inflation, and the economy started recovering, and the unemployment decreased. All these reforms created a slightly better

environment for the underserved in the country. The unemployment rate was down around 1% each year from 2004 to 2008.

(source :[www.bps.go.id/sector/employ/table3.shtml](http://www.bps.go.id/sector/employ/table3.shtml)).

Computer education and use in Indonesia started early 80s. The use of Internet started around 1995. This was followed by the individuals first using computers at the Internet Cafés and gradually affording to buy computers. After the year 2000, the government has prioritized using ICT in education in all parts of the country. The government and the businesses started using ICT as much as possible. As a result, there was an increase in the number of Community Access Points (CAP) for citizens.

Today the use of ICT for disseminating information is very popular in some higher education organizations, schools, and other segments of society. Based on SUSENAS data survey, there are an increasing number of people who access the Internet. In higher education, an increasing number of students and teachers are using Internet for searching scientific information, news, and entertainment.

The Internet seems to be influencing and dominating to be the prime source of information in the country. Although regional and socio-economic differences in adopting ICT exist in the country, the general trend and recent efforts seem to be positive and promising.

#### 1.4 Research Rationale, Sample, and Methods

This research aims to examine three major venues offering public access to information via the ICTs, especially the Internet. Some of these venues have existed in the country as part of the use of ICT, such as the Internet cafe, Warmasif (information society café), Warintek (information technological café), university libraries, non-governmental organizations, and the local authorities. Among the existing and new venues, the choices of venues to study were made based on:

1. the degree of openness to public
2. the degree of government support
3. the degree of low-cost or free access
4. the degree of how wide spread and available is the venue.
5. the degree of service to under-served communities considering age, gender, income and education level.

The selection process resulted in the top three venues as Community Access Points (CAPs)

1. Warmasif
2. Warintek
3. Public Libraries

The research required two different kinds of information:

- a) general assessment of the country and the venues
- b) detailed assessment of and research about the venues

For both of the above, secondary and primary data sources are used. Secondary data sources are gathered via the Internet, news, reports, and government publications as well as the general and available statistics. The primary sources include the high level public sector professionals who are responsible for the planning, implementing and monitoring the Community Access Point (CAP) in Indonesia:

1. Prof. Dr. M. Nuh: Minister of Communication and Information
2. Dr. Suhono Harso Supangkat: an expert in Departments of Communications and Information.
3. Drs. Freddy H. Tulung MUA, Director of Information Dissemination and Public Facility, Department of Communications and Information..
4. Joko Agung: Director of E-government, Department of Communications and Information.
5. Suparwoto: Head of Public Information Board, Departments of Communications and Information.

We also talked to various other public sector officials at the local government in Yogyakarta:

1. Dr. Achmad Djunaedi: Head of Regional Information Board, Local Government of Yogyakarta Province
2. J. Surat Djumadal, Head of Information Technology Services Unit, Local Government of Yogyakarta Province.
3. Ig. Sumasriyono, Head of Data Electronic Processing of Bantul Local Government.

The interviews were carried out via face-to-face meetings, phone calls, and were initiated and followed by email as and when necessary. Moreover, a questionnaire-based survey was conducted to obtain information regarding the venues, the use and the users of these venues. Sixty operators were selected and their distribution is: 20 from public libraries (10 urban and 10 non-urban area); 20 from Warmasif (10 urban area and 10 non-urban area); and 20 from Warintek (10 urban area and 10 non-urban area). Of the 60 operators at various venues, 9 different locations were visited in person; 12 public libraries were contacted by phone and facsimile; 15 Warmasif and 12 Warintek venues were contacted by email and phone. Although, all 60 locations were contacted; 5 public library, 3 Warmasif, and 5 Warintek were not available, due to time constraints and other reasons such as the venue was not fully open yet, or it did not exist anymore.

In total, we have surveyed 45 respondents; of which, 15 was at the public libraries (7 urban and 8 non-urban areas), 17 Warmasif (9 urban and 8 non-urban areas), and 15 Warintek (8 urban and 7 non-urban area).

Overall, the research covered representatives on Community Access Point (CAPs) in urban and non-urban areas. Though statistically not significant to draw any generalizations, the research provides some detailed information on venues.

## 1.5 Information Needs of Underserved Communities

The underserved communities in Indonesia are typically those who are unemployed, have low income, and have little or no formal education. Stay-home-housewives and small business owners can also be considered as underserved. The following variables are used when categorizing the underserved: whether they are urban or non-urban dwellers, their socio-economic status, level of education, level of income, and gender. In general, those who live in rural areas are underserved because of lack of sufficient infrastructures, education and the information.

The information needs of the underserved communities can be various. For example, if we take the unemployed, they need to access Internet for finding jobs. For student populations, they need to access Internet for research and homework. Housewives can be empowered with ICT so that they can be in touch with social and economic issues in the country; to find jobs and improve their overall status in the society.

Low-income people who cannot afford a computer, but need to improve their ICT skills, and be able to use new communication tools, may obviously benefit from CAPs. They can learn how to use email or chat in order to be in touch, and do job search. CAPs are also needed by those who have small business but cannot afford a computer to market their products and services on the Internet. At CAPs they can open their business to the world online.

## 1.6 Strengths, Weaknesses, and Opportunities in Key Public Access Venues

The major observed strengths of the venues are that:

1. they are well-planned and government backed,
2. have a reasonably uniform distribution and reasonably spread in entire country,
3. all have recent technologies installed (especially for Warmasif and Warintek),
4. most of the venues have strategic locations (convenient and can easily be reached).

However, the following are some of weaknesses:

- currently, most of the public libraries do not offer ICT,
- the underserved communities have limited IT education. Certain incentives, such IT training, are necessary to encourage them.
- Many venues and the libraries are open only during regular business hours (8 am to 4 pm). Limited hours are limiting the users.
- Some venues had to discontinue their services, because they didn't have enough number of users and could not afford the operational cost.

- many underserved people still do not know what services are available to them. For example, a few people visit Warmasif and use only one or two services. People still have not used several services of Warmasif, such as, e-commerce, e-library, and e-health.

Moreover, Indonesia has some challenges ahead regarding how to manage and maintain the venues. It is observed that several venues did not exist anymore because there were only few users who visited them. The local management might not have enough funds to maintain the long-term operation.

Underserved people often think that computers are expensive and are used by people with medium or high income. Local governments can provide free training for underserved people in order that they know how to use ICT, and benefit from it.

## 1.7 Salient Findings

The outcome and findings of the research can be summarized as follows:

1. There is a strong political will towards having an information society in Indonesia. The government has been coordinating and funding some initiatives to enhance the availability of ICT in the entire country.
2. The Freedom of Access to information Law emphasized the need for information transparency in Indonesia.
3. The government gives importance to bridging the digital divide in Indonesia. It is implementing many initiatives to provide free ICT training centers and ICT infrastructure, in urban as well as in non-urban areas.
4. The public is not well informed about venues that they are equipped with ICTs and are convenient places for learning and information access. The most widely spread public access venues are the public libraries. However, these libraries are traditional and do not use ICT. Other public information venues, Warintek and Warmasif, don't seem to operate effectively. Because they lack sufficient ICT infrastructure and skilled staff operating the venues.
5. In general, what characterizes the country is absence of an ICT infrastructure and the digital divide. These issues need to be addressed, should the government aim towards creating an effective information society.

## 1.8 Key Recommendations

The Indonesian government is committed towards having an information society by 2015. Regarding this ambitious goal, however, the government must take into consideration the digital divide, limited ICT infrastructure and limited contents in some public access information venues. The initiatives for enhancing the quality of existing public access information venues is the right way forward.

The public libraries are the most widely distributed public access information venues. During the research it has been found that many of the public libraries are not equipped

with ICT and skilled staff. The government must enhance and improve the ICT infrastructure of all public libraries and improve the capacity of human resources for ICT use in these venues.

The two existing initiatives, Warintek and Warmasif programs are aligned with the vision towards an information society. However, based on our survey, only few people visit the Warmasifs because many locals still do not know about them. Second, most of the underserved people do not know how to use ICTs. They often think that computers are expensive and are generally used by people with medium or high social status. Finally, also based on the survey, it seems that the services of Warmasif (especially e-commerce) still has not been effectively offered and used by people. Local governments should advertise the venues and offer free training to people. In this was not only they can learn how to use ICTs but may also benefit from them especially in the areas of e-commerce for the local crafts and fresh produce. Therefore the availability of the local content is also important and will contribute to the degree of usefulness of ICT.

## 2 Methodology

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### 2.1 Venue Selection

2 paragraphs

Brief description of the selection process: how you selected the types of venues to be studied, why they were included, why others were left out.

Note: this data collection template is designed to capture info about 4 venue types. If you study in detail more than 4 venue types in the country, include a full description of the 5<sup>th</sup> one as an appendix, using the same set of questions.

-

Until recent days, Indonesia did not have any public venues where the people could access information for free. The major venues where people can access information and communication are the Internet cafes, universities/schools, Warmasif (information society café), Warintek (information technology café), workplaces and households who could afford computers. Some public libraries in the urban areas have a computer lab with Internet access.

In this study, we focus on public libraries, Warmasif (information society café), and Warintek (information technological café). In Indonesia, so far there are 14.516 public libraries, 63 Warmasif, and 84 Warintek.

#### **Warmasif (Information Society Café)**

In Indonesia, there are 63 Warmasif established from 2005 to 2008, 26 of which are located in urban areas and 37 Warmasif are located in non-urban areas. The number of users amounts to 120.000 annually. Warmasif is one of the many Community Access Points (CAPs), which was founded through collaboration among The Department of Information and Communication PT. Indonesian Post Office, and local governments in every city.

Warmasif has the objective to decrease the digital divide in the Indonesian society. In other word it is to accelerate access information in entire Indonesian society especially for underserved communities. Each of Warmasif provides 3 main services:

- 1). e-commerce for small and medium business,
- 2). e-library for students, teachers, and the public,
- 3). e-health information for all society.

#### **Warintek (Information Technological Café).**

Warintek is also another popular Community Access Point (CAP) in Indonesia. 87



Warintek have been operating since 2001. Today, 37 Warintek are located in urban areas (big cities) and 47 Warmasif are located in non-urban areas (small cities). The number of users amounts to 150.000 annual.

Warintek is an effort to empower units of documentation, information, and libraries that are funded by Department of Research and Technology (The Government of Indonesia). Some Warintek are self-funded. Most of Warintek venues located at local public libraries, higher education libraries, in government documentation units and in non-governmental organizations (NGOs). The objectives of Warintek are to improve local information resources there by to help underserved people access information.

### **Public Libraries**

In Indonesia, there are 14.516 public libraries. There is 1 national library, 25 national provincial libraries, 519 university libraries, 12,620 school libraries, 769 public libraries at city level and 800 special libraries. There are three types public libraries in Indonesia:

1. Traditional libraries (in small towns and villages without ICT);
2. Semi-modern libraries (in cities; adapted ICT without online services);
3. Modern Libraries (in big cities or higher education; using ICT for services)

The selection of these 3 venues was based on the following criteria: They are

- 1). open to public,
- 2). government backed,
- 3). require no fees,
- 4). widely spread around Indonesia,
- 5). aiming to address information needs of the all society and especially the underserved who cannot afford to have a computer at home or who are unable to use ICTs due to lack of skills required.

The Internet cafes were not chosen because they do not meet the criteria above. Eventhough the number of Internet cafés are more than 5.000, and they are widely spread public access venues in Indonesia; they are commercial venues and privately owned. In addition, universities and schools also were excluded from our study, because they provide access only for their students.

Telecenter, Aceh Media Center, Information Plaza were also excluded from this study because they are not widely spread in all parts of Indonesia.

### 2.1.1 Venues studied

Enter the details to complete the table based on the venues studied in this country (more details will be filled in other sections):

	Public Libraries	Warmasif (Information society café)	Warintek (Information technology café)	Venue 4
Total number in country	<b>14.516</b>	63	84	
<b>A. # in urban location</b>	Not known	26	37	
% offering ICT	2%	100%	100%	
Total # of people served (annual)	Not known	around 120.000	around 150.000	
<b>B. # in non-urban location</b>	Not known	37	47	
% offering ICT	Not known	100%	100%	
Total # of people served (annual)	Not known	around 80.000	around 120.000	

**Comments** (comment especially on definition of urban/non-urban in the country):

**Urban:** A territory where is a capital of province, city or country.

**Non-urban:** a territory that is known as district or regency.

### 2.1.1 Other experiences of public access to information that are not quite “venues”

Basic information about other experiences with potential to make a difference to the public access landscape (tea rooms, Wi-Fi hotspots, coffee houses, web information portals) although they are not quite a “public information venue” in the sense defined for this study (see research design document for definition).

#### **Other public access experience #1: School and University Library**

Around 50% of school/university libraries have access to information. Most of school/universities in the urban area have a computer lab with Internet access and hot spots.

Total number in country: 13.139

% offering ICT access: 50 %

% in urban location: 60%

Comments on how it is influencing public access venues in the country:

These kinds of services are aiming to address the information needs of the all students, teachers/lecturers, and their staff.

The reason why it was not included in this study is that they are not open to all public; they provide service only for their students, teachers, faculty and staff.

### **Other public access experience #2: Internet Cafe**

#### Description:

Internet Café venues are widely spread in entire Indonesia. They are mainly in urban areas, especially in Java island. These venues are open to public, provide ICT access, but are not free. Some Internet Cafés have hot spots. Internet cafes, mostly, are full of young people, using the Internet for individual entertainment, chatting, and communicating.

Total number in country: around 5.000

% offering ICT access: 100%

% in urban location: 80%

#### Comments on how it is influencing public access venues in the country:

Internet cafes are established almost everywhere in Indonesia, and the prices are not too expensive. Reason why they were not included in this study: they are commercial and owned / operated by private parties.

### **2.1.2 Other existing public access venues, not included in this study**

Basic information about other public access venues **not** included in the study (e-tuktuk, school or other private libraries not open to the public, health centers, etc), although they could play a role in public access information in the country. Indicate rationale for NOT including them in the study.

### **Other venue not studied #3: telecenter**

#### Description of the Venue:

A telecenter is a public place where people can access computers, the Internet, and other digital technologies that enable people to gather information.

Total number in country: 6

% offering ICT access: 100%

% in urban location: 100%

Reason why it was not included in the study:

- only a few (6) telecenter at Indonesia
- this program was supported by Bapenas and UNDP 2002-....However after the project had ended, there are limited government support.

#### **Other venue not studied#4: Aceh Media Center**

Description of the Venue:

Media center is a venue that provides data and information about Tsunami Disaster in Aceh. It also provides free Internet access for community and Non-Governmental Organizations (NGOs).

Total number in country: 7

% offering ICT access: 100%

% in urban location: 100%

Reason why it was not included in the study:

Established only in Aceh. These venues have specific purpose for providing tsunami information.

#### **Other public access experience #5: Information Plaza**

Description :

The local Government of Yogyakarta has developed this program. The objective of the program is to provide information portal for people who want to get information about Yogyakarta. This venue provides Internet access, and local content about Yogyakarta. The venue located only in Yogyakarta.

Total number in country: 1

% offering ICT access: 100%

% in urban location: 1

Reason why it was not included in the study:

- It is located only in Yogyakarta and the scope of services is too narrow.

## 2.2 Inequity Variables

1-2 paragraphs each.

Describe how each variable affects equitable public access to information and ICT in this country, and what you did in this study to make sure each one was addressed (for example, if you visited venues in both urban and non-urban locations).

Also include additional variables of local relevance to your country, as you listed in Form 1, section 1a.

### 2.2.1 Socio-economic status

The level of income remains to be one of the major factors having an impact on the access to the information and ICT in Indonesia. People who have low income tend to use their money for primary necessities (i.e. buy food, cloth, house). On the other hand, the higher income groups can have an access to various ICT media including computers; workplaces, mobile devices and can afford the Internet or mobile connections.

There are obvious educational, social and economic discrepancies among the provinces of Indonesia. (Source: [www.datastatistik-indonesia.com/component/](http://www.datastatistik-indonesia.com/component/), Indonesian Statistics Data 2006.) In general, people who live in Java have higher socio-economic status than the people on other islands. The total population is 218 million people and the unemployment rate is around 4%. Based on a 2007 economical report from Indonesia Central Bank, the Indonesia economy going for the better. The local economies are contributing more and more to the growth of national economy. The national economic growth will help government investment on ICT and enhance the quality of public services.

### 2.2.2 Educational level

The level of education is directly proportional with the need for information. Because all educational activities need to be supported by information. In general, the level of education brings two concerns:

- 1). *the need* for the information.
- 2). *the ability* of the individuals in access information,

For people who have higher education, it is easier to understand and utilize technologies that are often required to reach information. But those with little or no formal education will face challenges in accessing information.

Based on the survey, the students and government employees rank equally the highest in Internet use: (30%). Followed by workers (10,1%), others (7,7%), business owners (4,5%), and housewives (1.5%).

[source: www. [www.jawatengah.go.id](http://www.jawatengah.go.id), 2008]

The education is compulsory for people between 6-15 years and the literacy rate is around 92%. 17.13 % students are in high schools, and 24.29% in college/universities. (Source: percentage of population by province and educational attainment, <http://www.bps.go.id/sector/iptek/table2.shtml>)

### 2.2.3 Age

As in other countries, age is also an important factor determining the access to information and ICT in Indonesia.

A large portion of the population is young. In 2005, the percentage of the people between 15-64 years of age constituted around 66%, and the people between 0-14 years around 29% of the population. Those who are beyond 65 years of age make up only 4.6% of the population. (Source: Indonesian Statistics Data, 2008)

Table 1. Distribution of Population by Age Groups (in Percentage)

Year	AGE		
	0-14	15-64	65+
2000	30.7	64.6	4.7
2005	29.2	66.2	4.6

[http://www.datastatistik-indonesia.com/component/option,com\\_tabel/task,/Itemid,165/](http://www.datastatistik-indonesia.com/component/option,com_tabel/task,/Itemid,165/)

Obviously, a large portion of the country's population influences the need, the requirements and the access conditions to the information and the ICT.

## 2.2.4 Gender

Gender is another important determining factor for accessing ICT and information in Indonesia. The role of sexes changing gradually in the society, practically however, the roles are still defined in traditional ways. Especially in the non-urban areas (small cities and villages), the public opinion is that men have to earn money out in the business world and women must stay at home and take care of the family. As such, women are less involved in accessing to information and ICT.

Males are 50.26 % and females are 49.74% of the population. The percentages of the both sexes are quite the same figure.

### *Number of Population by Sex and Age Group*

Age Group	Laki-laki	Perempuan	Total
	<i>Male</i>	<i>Female</i>	<i>Total</i>
0-4	9,983,140	9,608,600	19,591,740
5-9	11,370,615	10,739,089	22,109,704
10-14	11,238,221	10,614,026	21,852,247
15-19	10,370,890	9,958,783	20,329,673
20-24	9,754,543	10,150,607	19,905,150
25-29	9,271,546	9,821,617	19,093,163
30-34	8,709,370	9,054,955	17,764,325
35-39	8,344,025	8,428,967	16,772,992
40-44	7,401,933	7,347,511	14,749,444
45-49	6,418,712	6,190,218	12,608,930
50-54	5,266,079	4,851,176	10,117,255
55-59	3,813,793	3,563,361	7,377,154
60-64	2,800,974	2,918,499	5,719,473
65-69	1,990,762	2,192,385	4,183,147
70-74	1,470,205	1,570,199	3,040,404
75+	1,408,711	1,462,776	2,871,487
Total	109,613,519	108,472,769	218,086,288
Percent	50.26	49.74	

Source : © Indonesian Statistics Data  
(2008)  
[http://www.datastatistik-indonesia.com/component/option,com\\_tabel/task,/Itemid,165/](http://www.datastatistik-indonesia.com/component/option,com_tabel/task,/Itemid,165/)

Even though the percentages of males and females are near each other, gender is still a strong factor determining who can have access to ICT and information. In one study, when a group of 16 to 74 years old were surveyed about their usage of computer and the Internet, house wives who take care of family at home, came out to be lowest in the rank: with 1.5% for the Internet use, compared to students, the retired, employees, workers, business owners, and others.

#### 2.2.5 Location

This is a good place to offer further details on the urban/peri-urban/non-urban definitions and relevance in your country, among other location variables.

Indonesia is a large country with 5 big islands, 33 provinces, some with large cities and many with non-urban areas. These differences in location may directly influence the public access to information and ICT, especially for underserved people. Thus, location is also a significant factor in defining inequities to the public access to information and ICT.

Many urban areas have public access to information and ICT, but there is lack of ICT in the non-urban areas.



## 2.2.6 Other inequity variables

## 2.3 Data Gathering Techniques

Describe the different data gathering techniques you used to conduct this study. Provide specific examples and sample selection criteria.

### 2.3.1 Literature review

Describe the type and approximate number of documents reviewed. Include detailed references of the most useful ones. Include valid links for all online sources.

More than 30 documents were reviewed.

The information in the report was collected in various ways: face-to-face interviews with government experts and professionals; phone interviews with top officials of the Department of Communication and Information; review of literature on e-government, the national government and local governments; review of papers about the use of ICT in Indonesia; review of economic and social reports from Indonesia Central Bank and BPS (Board of Statistic). We also collected data by using questionnaires and interviews at 9 locations with 60 operators of public venues.

### *2.3.1.1 Most useful bibliography and online sources:*

1. UU no 43 Tahun 2007(Law no 43 Year 2007): the law regulates Library in Indonesia.
2. Inpres no 3 tahun 2003(President Instruction no 3 Year 2003): on E-government
3. Peraturan Gubernur Provinsi Daerah Istimewa Yogyakarta no 42 tahun 2006 in Digital Government Services In Yogyakarta.(Governor Regulation on Digital Government Services no 42 Year 2006)
4. UU Kebebasan Informasi Publik( Law on Freedom of Public Access to Information )
5. “Teknologi Informasi, Pilar Bangsa Indonesia Bangkit” (Information Technology, The Major Force for Indonesia to Rise), Department of Communications and Information, 2003
6. Indonesia Central Bank Economical Report 2007”, The Indonesia Central Bank
7. Kamil,Harkrisyati;” The Growth of Community Based Library Services in Indonesia to Support Education” World Library and Information Congress 2003
8. Ifransah, Mukhlis; Donny B.U.; Rapin Mudiardjo;” Indonesia ICT, e-Commerce & e-Business Industry Regulation1 (Q&A Preview)” ;Indonesia ICT Watch 2006.
9. Cahyana Achmadjayadi;”Isu Pokok dan Program Kerja Dirjen Aplikasi Telematika 2006-2009” (Major issues and Work Programmes of Directorate General of Telematics 2006 - 2009), Departments of Communication and Information 2006
10. Survey on Social Economic Report 2006; BPS 2006.
11. Survey on the adoption of ICT in Small and Medium Enterprises in Indonesia
12. Belawati, Tian; “Indonesia ICT Use in Education”; UNESCO Meta-survey on the Use of Technologies in Education accessed from [www.unescobkk.org/fileadmin/user\\_upload/ict/Metasurvey/indonesia.pdf](http://www.unescobkk.org/fileadmin/user_upload/ict/Metasurvey/indonesia.pdf)
13. [www.bps.go.id](http://www.bps.go.id)
14. [www.Warintek.ristek.go.id](http://www.Warintek.ristek.go.id)
15. [www.Warintek.bantulkab.go.id](http://www.Warintek.bantulkab.go.id)
16. [www.Warintek.slemankab.go.id](http://www.Warintek.slemankab.go.id)

17. [digilib.fe.unibraw.ac.id/mlg\\_Warintek/Warintek.htm](http://digilib.fe.unibraw.ac.id/mlg_Warintek/Warintek.htm)
18. [www.pdii.lipi.go.id/Warintek/index.php](http://www.pdii.lipi.go.id/Warintek/index.php) - 26k
19. [www.piksi-unnes.com/](http://www.piksi-unnes.com/)
20. [www.pemda-diy.go.id](http://www.pemda-diy.go.id)
21. [www.apjii.org](http://www.apjii.org)
22. [www.pnri.go.id](http://www.pnri.go.id)
23. [www.worldbank.org](http://www.worldbank.org)

### 2.3.2 Individual interviews

Describe the type and approximate number of individuals you interviewed. Include detailed contact information for the most useful ones (indicate for which topic, if appropriate). Discuss how representative is this sample of people you interviewed in relation to different opinions and perspectives in the country.

4 public sector professionals and academics; more than 60 operators at public information venues.

We have interviewed public sector professionals in Central Java, and Yogyakarta. We selected them because of their ambitious goals to provide public access to information in their areas. Also we had phone interviews with the experts from Departments of Communications and Information. We collected data about the initiatives of the government on providing public access to information venues.

After we completed data, we surveyed the locations and interviewed more than 60 operators in 9 different locations of the venues.

### 2.3.3 Group interviews and focus groups

Describe the type and number of group interviews or focus groups you conducted. If available, include detailed contact information for the most useful informants (indicate for which topic, if appropriate).

number of group interviews or focus groups.

There were no group interviews and focus groups.

### 2.3.4 Site visits

Describe the number and location of site visits you conducted. If available, include detailed contact information for the most useful informants (indicate for which topic, if appropriate).

9 number of site visits.

SURVEY	NON-URBAN				URBAN					TOTAL
	Bantul	Sleman			Yogyakarta					
VENUE TYPE										
Library	1	1			1					3
Warmasif	1	1			1					3
Warintek	1	1			1					3
	3	3			3					9

### 2.3.5 Surveys

Describe the location and number of respondents to surveys you conducted for this study. Indicate their relative distribution across venues (for example, 30% in telecenters, 20% in cybercafés, 50% in public libraries), and how they were selected.

Describe the venues, their locations and the sample size for each:

	Public Libraries	Warmasif	Warintek	Venue 4
# of <b>urban</b> venues surveyed	7	9	8	
# of <b>non-urban</b> venues surveyed	8	8	7	
# of respondents in <b>urban</b> venues	7	9	8	
# of respondents in <b>non-urban</b> venues	8	8	7	

NB: We only surveyed operators no user survey has been done.

#### Survey description and comments:

description of the survey activities and instruments used; include limitations in the sample or application

The first step was choosing the locations (10 urban and 10 non-urban area). Each of the area must have 3 venues: public library, Warmasif, and Warintek. In total, we planned to interview 60 operators at the venues. 20 were public libraries (10 urban and 10 non-urban area); 20 were Warmasif (10 urban area and 10 non-urban area); and 20 were Warintek (10 urban area and 10 non-urban area). However, it was to our surprise that several venues did not exist anymore, and some other venues could not be contacted.

During the second step, the questionnaire was distributed among the operators in each venue. For public libraries, the questionnaires were sent by facsimile. In some cases, they were contacted by phone, because most public libraries do not have Internet access. For Warmasif and Warintek, the questionnaires were sent by email.

As for the venues located in Yogyakarta (9 venues), we visited and interviewed them.

In total, we have surveyed 45 respondents: 15 at the public libraries (7 urban and 8 non-urban area); 15 at Warmasif (9 urban and 6 non-urban area); and 15 at Warintek (8 urban and 7 non-urban area).

### 2.3.6 Other data gathering techniques

#### Other Data Gathering Technique 1: Informal talk with the operators.

After the respondents submitted us the completed questionnaires, we followed up by phone for further clarification. Through informal talk with the operators, we tried to understand the issues deeper at their venues.

Indonesian people are pleasant and friendly. At the time we visited some venues, the operators told us about the venues, the type of users who visit the venue, and the types of information people seek, etc.

### 2.3.7 Most useful contacts

List here some of the most knowledgeable and useful contacts that can provide additional information and insight, in case someone else wants to gather additional information about this topic in the country.

Paste contact details here: name, position, organization, contact info, area of expertise of knowledge.

#### EXPERTS

	NAME
Ministry of Communication and Information	Prof. Dr. M.Nuh
An expert in the Communication & Information Dept	Dr. Suhono Harso Supangkat
Director of Information Dissemination and Public Facility, Department of Communication and Information.	Drs. Freddy H. Tulung MUA
Director of E-Government, Department of Communication and Information	Joko Agung:
Head of Public Information Board, Department of Communication and Information	Suparwoto
Head of Regional Information Board, Local Government of Yogyakarta	Dr. Achmad Djunaedi:
Head of Information Technology Services Unit, Local Government of Yogyakarta Province.	J. Surat Djumadal,
Head of Data Electronic Processing of Bantul Local Government.	Ig. Sumasriyono,

#### SURVEY CONTACTS

Warmasif Bekasi	Dhora Herawati	170bo@posindonesia.co.id
Warmasif Jakarta Barat	Yudha Pribadi.	110mtsi@posindonesia.co.id

Warmasif Semarang	Dyah	500Warmasif@posindonesia.co.id
Warmasif Jakarta Utara	Dewi Noviyanti	
Warmasif Pontianak	Mirzant Art I Nyoman	anto14@posindonesia.co.id,
Warmasif Denpasar	Sukadana	780sdm@posindonesia.co.id
Warmasif Surabaya	Adhe	
Warmasif Malang	Rusdianto	800filateli@posindonesia.co.id
Warmasif Bandung	Indrian Wahyudi	indrian@posindonesia.co.id
Warmasif Yogyakarta	Irfansyah	0818 0271 3971

## 2.4 Research Trustworthiness and Credibility

2-3 paragraphs

Describe any steps you took to minimize your own bias in conducting this study, and to increase the credibility and trustworthiness of the results you are presenting.

We received valuable support from Department of Communication and Information, particularly from four government officials who are actually responsible for creation and implementation of ideas about the venues.

The Department of Communication and Information gave full support to our research. They had contacted the researchers and provided any data related to the research. We also receive support from the local governments. They provided any data related to e-government initiative, managed by the local governments of Yogyakarta and Bantul.

Also please talk about the degree of how representative this research is in terms of ICT access, for example. Did you cover the best possible venues?

We chose 60 venues that are distributed in urban and non-urban areas. They are located in Java, Bali, Sumatera and Kalimantan. We think that the distribution of venues' locations justifiably represent whole Indonesia.

### 2.4.1 Research limitations

Describe important limitations you encountered in conducting this research, and limitations in drawing generalizations or broader conclusions based on the findings you report.

A few limitations we encountered should be mentioned here:

- When the research was conducted, one Warmasif did not exist any more and the two post offices did not have Warmasif. Therefore, some data required for in depth venue assessment for Warmasif at the post offices still were not available.
- Some public libraries (5 venues) could not be contacted. Perhaps, they have changed their phone number. Some Warintek could not be contacted and some did not exist anymore. Therefore, some data required for in depth venue

assessment for public library and the Warintek still were not available.

- Some of the results gathered from the site visit should not really be taken as representative and generally applicable to the situation in this country. The aim of these site visits was to get a closer look at the venues.

There are few number of venues (15% Warmasif, 25% Warintek, 15 % public library) that could not be contacted. These are not going to have a considerable impact on the result of survey. Because we had sufficient representative venues, balancing between urban and non-urban areas.

#### 2.4.2 Team qualifications

1 paragraph

Description of the research team and its qualifications to undertake this study.

The lead researcher initially worked with graduate students at in UK for initial data gathering and feasibility study. Later a small team was established in Indonesia. The team had 2 researchers, with master's degrees in Information Systems. They collaborated on this research on data collection and completion of surveys. There was also 1 part time staff who helped collect data from public libraries by phone.

The lead researcher is a well experienced researcher. The local researchers have several years of experience in managing and designing various researches in Indonesia. Their experience in conducting similar research has been instrumental in interviews, and data analysis.

## 3 Country Assessment

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### 3.1 Overall Country Assessment

Provide a broad picture of the public access information landscape in the country, informed by the results of this research. In 2-3 paragraphs, what is your overall assessment of public access information venues in this country?

When introducing the ICT and its infrastructure, its education and the access to information by the citizens and the underserved community, the geographical outlook of Indonesia with its many islands seems to be the most important issue to mention. There fore there are various differences in terms of access according to location, and access to information in Indonesia becomes varied and mostly concentrated in Urban Areas. The public information access venues that are located in non-urban areas over many small islands are very limited. Public information access that are mostly located in urban areas include public libraries, technological information cafés (Warintek), information society cafés ( Warmasif), free hotspots in commercial areas, free hotspots in educational institution, educational institution libraries, internet cafés, and information plaza that is provided at Yogyakarta region. The public information access venues that are located in non-urban areas are public libraries, technological information cafés (Warintek), information society cafés (Warmasif), and a very limited number of telecentres. This study focuses on three venues that are studied in this research - i.e. public library, technological information café and information society café.

Most of public libraries are located in Urban areas and equipped with mobile libraries for reaching out public living and needing information in remote areas. There are 14.516 public libraries in Indonesia. Public libraries provide books, limited digital information i.e CD-ROM, and limited internet access. They are not really using ICT for improving their public services. Many of public libraries provide digital information and internet access because they are awarded a support for Warintek program from the Ministry of Research and Development. Warintek Program is an effort for empowering units of documentation, information, and library. This effort has been formed via implementing many initiatives such as enhanced ICT, supporting people for accessing information, enhanced human resources and improved local information. This program hopefully affects local economic development through small enterprises. Each of Warintek provides digital information that can be accessed from their web site [www.Warintek.ristek.go.id](http://www.Warintek.ristek.go.id) and a CD ROM including related information for agriculture, animal husbandry, water and sanitation, energy, food processing, etc.

The next venue, Warmasif, is similar with Warintek but they are located in Post offices and equipped with PCs for internet access, scanner and printer. The vision of Warmasif is building the prosperous information society through the use of information and communication technologies that are efficient and effective in the frame of building a harmonious state of Republic of Indonesia. Warmasif is a collaboration program between ministry of Information



and Technology, PT Indonesia and Local Government. The aims are

- supporting the development of commercial commodity and businesses in each local area, especially at central java is based on agribusiness,
- decrease discrepancy of society for accessing information, knowledge and communication, and
- meeting Universal Service Obligation quicker.

However, the research shows that the objectives of this program are not yet met effectively. Based on our interviews, some Warmasif operators stated that, for example, e-bussiness facilities are not yet running properly. It has been observed that there were limited number of small and very small companies which uploaded their adverts in Warmasif website. We think that there are some reasons preventing the effectiveness of Warmasif. Small and medium enterprises lack proper ICT literacy, insufficient access to promotion via Warmasif, and no free trainings for using Warmasif may be counted as major reasons.

In Indonesia, there are limited public access information venues that are equipped with ICT and can provide comprehensive and useful information. Moreover, public services does not seem to have well taken care of in such ways. The image of public services are sometimes not helping people to attend the venues. For example, public library is the most widely spread venue providing public access to information. However, most of them are traditional and they are not equipped with ICT. The research found that among many only 148 digital libraries exist in Indonesia. This is less than 1% of all public libraries. Also, other public services venues such as Warintek and Warmasif are very limited in number. Some local governments have been developing public access to information venues that are aiming to be relevant to local need. But these are not sufficient and the government must be more aware and put more effort to enhance services via public access venues, the facilities and the relevant content. Though not so easy, such efforts for developing venues that are comfortable, have ease of use and are equipped with modern technology will improve the willingness of people to attend and use the public venues.

## 3.2 Real Access Framework

Summarize the key findings and your assessment of each dimension in the Real Access framework used in this study. You will provide more details later.

### 3.2.1 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in the country (physical access, appropriate technology, affordability)?

In Indonesia, most public information venues are located in a strategic locations, such as main streets. However, they are not usually equipped with modern technology and seem to offer services that are easy to use for the citizens. Therefore, most public access venues are located in urban areas. There are, though, some efforts where local governments aim for enhancing the quality of the venues and provide facilities for reaching out people in non-urban areas. For example, the development of plaza informasi (information café) at Yogyakarta, and mobile

Warintek that provide internet connection for people in non –urban areas are among such efforts.

In terms of appropriate technology that are provided in public access information venues, one can easily observe that there are limited ways of using information technology for providing information. Most information provided in digital format is pdf form. People can download the information through website or access the CD ROM that are provided in public libraries or Warintek. Alas, there are also much effort by district local governments aiming to develop digital libraries, and free hotspot in public library buildings in their regions.

The venues are funded by the government and therefore charges are affordable or free. The affordability for accessing the different venues can be different depending on location. In most public libraries, people only pay a membership fee and do not pay for lending books or CD-ROMs. However, if people want to use internet access at Warmasif or Warintek, they have to pay. For example fee for internet access at Warmasif Yogyakarta is Rp 3000,00 per hour, internet access fee at Yogyakarta public library Rp 1000,00 per hour. The price is cheaper than internet café price. Bantul public library provide all of their services free of charge.

### 3.2.2 Capacity

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in the country (human capacity, locally relevant content, integration into daily routines, socio-cultural fors, trust in technology, social appropriation of technology)?

The human capacity of each venue depends on capacity of the organizations which are responsible or managing the venue. Some venues have more staff who are expert in ICT. But there are many other venues without any skilled staff in ICT. Based on our interviews, in general, those venues which are solely dependent on government funds are most likely to have unskilled staff and those venues that are embedded in higher education have skilled staff with proper ICT training- i.e. Warintek UNNES.

Provision of relevant content is also limited. There are some locally relevant content offered via Warintek program and plaza informasi that is situated in Yogyakarta. Plaza Informasi is a part of digital government services that is organized by the Local Government of Yogyakarta. The aim of the program is develop information networking that helps people to have easier access to information about Yogyakarta. The program is fully supported by The National Government of Indonesia.

The research found that there are an increasing number of people attending public information access venues. These are often educated and most of them are young. Among these users there seems to be a strong belief that the venues can help them improve quality of their life. In response to this there are initiatives by the government to seek public support in opening venues that are equipped with modern technology and can offer better services than conventional venues. These are however like new trends and not a generally widespread.

In sum, the capacity in these venues in terms of operators, the ICT provided and user skills are not satisfactory, especially at those funded by the government. These however seems to be changing very slowly with very few new initiatives.

### 3.2.3 Environment

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in the country (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

Indonesia reached a positive situation in macroeconomic context indicated by 6,39 % economic growth in 2007, and decreasing the poverty level from 17,7 % in 2006 to 16,6 % in 2007. Based on economical report of Indonesia's Central Bank, the amount of people who has income per capita 1 US \$ per day are 10,3 %. This indicator is lower than MDG standard in 2015. The macroeconomic growth is supported by improvements at the local or regional growth. Some local areas that contribute to the macroeconomic growth are Jawa-Bali, and Nusatenggara. The improvement in economical conditions naturally supports and promotes investment on ICT, and the progress towards information society.

There are many legal and regulatory frame work related to the development of information society in Indonesia. The main legal are UU Kebebasan Informasi Public ( on the freedom of public access to information) and Inpres no 3 tahun 2003 (President Instruction on E-government no 3 year 2003). UU Kebebasan Informasi Public regulate the freedom of expression that are related to the right of access to information. Inpres no 3 tahun 2003 regulates e-government initiative in Indonesia. The legal framework stipulates that the national and local government have to support adopting ICT for improving public access to information, and in this way empowering citizens. The legal framework also promotes standardization and guidelines, for example, for developing local government websites and digital libraries.

The vision of the Government of Indonesia aims building a sound information society in and around 2015. So, the government have supported many initiatives to develop public information access in all urban and non-urban areas. The Ministry of Information and Technology aims for providing internet connection to all villages in 2009.

The pressure of globalization has also made the people more aware of the importance of education and information. Nowadays there are more and more people going to cyber cafés or public internet access centers. The commitment that Government of Indonesia aiming to allocate 20 % of the national budget for education in 2009 should improve the quality of education system. Increasing quality and availability of education should accelerate the move towards building sound information society in Indonesia.

### 3.3 Information Needs of Underserved Communities

Describe the specific information needs experienced by underserved populations, based on the results of your research. Who could benefit from better public access to information? This could relate to e-government services, health or agriculture information, job training, employment search, among many others. Include reference to the key inequity variables in your country.

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.
- (ii) Indicate the sources of data for this assessment

Based on interviews, it is observed that the need and the amount of information type can vary from groups of people to other groups and how they will be used for improving daily and general life.

Small to medium enterprises look for ways to develop tools needed for improving their businesses. The information in public venues seems not to be enough. The venues need better facilities –software or content – converting the ICT infrastructure to the needs of particular users. Similarly, information on agriculture is needed at the non-urban areas by farmers from villages.

Educated people need access to information relevant to their studies, and to other scientific and technological information sources. In Indonesia, until recently there was a limited scientific and technological information sources. PDII-LIPI (centre for documentation and scientific information – Indonesia Scientific Knowledge Centre) was the primary scientific information source. Now, there are many initiatives, especially by higher education institutions funded by Department of National Education, for providing scientific and technological information such as online journals.

The adoption and use of the Internet and the related technologies among women and men is somewhat different. Women seek information that are often related to their study. It is observed that women have more tendency to use chat and communication tools than men. The proportion of man reading online news, testing and downloading software, shopping, seeking jobs seem to be higher than women. Both seems to be active in using the Internet for web browsing and search. These differences reflect the needs of different gender group and is a great input for designing services at various venues to be more effective in satisfying the needs of the various user groups.

Normally, people seek information on employment in newspapers, and local manpower offices of the government. This activity seems to be moving to information access venues especially when an information portal helping more people to have access to needed information. The effort of local government of Yogyakarta to develop an information portal, which includes job search, should help improve the quality of information access especially in Yogyakarta local region.

**Source:** Interview with an expert form Yogyakarta Local Government and some operators of

*public information venues.*

**Wahid, Fathul;** "Using the Technology Acceptance Model for Analyzing Internet Adoption Between Man And Woman In Indonesia"; EJISDC 2007.

### 3.3.1 Information sources

4.2b) What are the current sources for this kind of information in the country? Are these sources adequate (current, appropriate to the population, etc.) In sum, does the locally-relevant content exist?

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.
- (ii) Indicate the sources of data for this assessment

The major source of information in Indonesia is the television. There are many TV channels that broadcast nationally or locally. Then, of course, some traditional sources such as news paper and radio. One interesting information source/media is the use of SMS for disseminating information. There are many cases showing the effectiveness of SMS for disseminating information to large public such as political information.

The use of ICT for accessing information is more observed in some higher education institutions, schools, and other segments of society that can afford having or accessing Internet. Based on SUSENAS data survey, there seems to be an increase in Internet access over the past few years, in general. In higher education, there are an increasing number of students and teachers who are using internet for searching scientific information, news, and entertainment. The trend show that in the future internet will influence the source of information in the country.

There is some locally relevant content which is mainly provided by Warintek ([www.Warintek.bantulkab.go.id](http://www.Warintek.bantulkab.go.id)). This is often aimed for the needs of small to medium enterprises that are mostly located in villages. However, this research finds that the content does not really meet the requirements of these companies nor the other underserved living in non-urban areas. The content seems to be general and not detailed enough and sufficient. The content built was static. There were no updates, which made the information obsolete or not so relevant.

**Source:** *susenas data survey 2006. Interview with expert.*

### 3.3.2 Key barriers to accessing the information that underserved communities need

Are the people who could benefit from this information getting access to it? Why or why not (e.g. content exists but not in the right language, print media exists but has not been distributed appropriately, digital media is available but people do not have access points, etc.)?

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Perhaps one of the key barriers is that much of the underserved communities in Indonesia did not have chances to receive a formal ICT education. So, they generally lack ICT skills even for basic use of the computers and the Internet.

Capability of using ICT between men and women in Indonesia is also different. Women tend to use Internet technologies according to how easy they are. However, men use internet technologies, normally, according to how useful they are. In general, men seem to have more chances to try and explore the technology whereas women do not have similar chances as men. These factor, in turn, may have influence what kind of technologies are being used often and being offered in various venues in Indonesia.

Based on our interviews, the locations and hours of operation of public access venues seem also a major barrier to accessing the information. There is a large population of people living in non-urban areas where there are only a limited number of public access venues. Indonesia is a large country with many Islands, and building ICT infrastructures and venues are particularly difficult. In non-urban areas, the number of venues and the Internet access are also limited both in terms of hours of operations of these venues and the technical infrastructure provided. These are, often, used by those who have some ICT skills.

The research also suggests that availability of appropriate and relevant content may also be one of the other challenges in making information access widespread. We think that the availability of content can be one of the fundamental problems. The information provided, even in some government web sites may be limited and not serving the purposes.

In summary, we may comfortably state that Indonesia as being a large country with many Islands pose difficulty in building ICT infrastructure and setting up venues especially in non-urban areas. Added to this are the preventing factors due to differences in access according to gender and education.

*Source: interviews with experts.*

**Wahid, Fathul;** "Using the Technology Acceptance Model for Analyzing Internet Adoption Between Man And Woman In Indoensia"; EJISDC 2007.

### 3.3.3 Ways users experience different types of public access venues

Based on responses to the open question in user surveys, how do users experience different types of public access venues? Are there any trends or preferences for kinds of information, services or ivities in one type of venue over another?

Based on the interviews with venue operators, most of the uses ICT seems to be for web browsing and using the email. Browsing information especially in Warintek seems to be very common. Users search applied technological and scientific information using the portal that exist in most of Warintek websites. Some people use email for communication. There were more than 9000 mailing list that cited 'Indonesia' in yahoogroups.com in 2003. Now there must be an increasingly significant number of people who use email and who join these mailing lists for communication. Other people use venues for chatting.

An interesting point is that people in non-urban areas use the venues for games especially in public libraries and Warmasif. In urban areas, among the users of public libraries and Warintek, those who use ICT for business and commerce are less than those users who use ICT for web browsing and email.

We found that there are some similarities in using the technology in each venue. Most of users use the web browser, email and chat. These applications are popular in almost all venues. However, users in different venues are not seeking the same kind of information. Warmasif user often seek less educational information than users in the others venues.

Based on the survey, there seems to be a difference in user opinion on the way venues are to be used. Warmasif and Warintek are the places for using Internet access, whereas public library is a place for studying or searching knowledge using books and other conventional media. There is also a difference in facilities offered. All Warmasif and Warintek provide Internet access, but there are only a few public library that provide Internet access.

In addition, there are also some differences in kinds of information sought between those venues:

- At the public libraries, in urban areas, information that people seek the most is education (41%) followed by news (13%). This situation is very similar as the public libraries in non-urban areas, the information that people seek the most is education (44%) followed by news (11%)

However, there is a differences of use if a public library is equipped with ICT. Most people in urban area visit to public library for entertainment (25%), followed education (14%) and news (15%). It is also happened in the non urban area, the top rank is for enteratinment (30%), followed by education (20%) and news (20%).

- At the Warmasif in urban area, information that people seek the most is news (26%) followed by others such as job finding (18%). In non-urban area, the top rank is education (33%) followed by entertainment, news, and personal (each around 12%).
- At the Warintek, information that people seek the most is education. This is not only for the urban area but also in the non-urban area

### 3.3.4 Inequity environment in the country

2-3 paragraphs

What does inequity look like in the country? Using the inequity variables described in section 2.2, provide a short overview of the main underserved groups, regions and/or other locally-appropriate segments of the population.

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The inequity situation in Indonesia affected by various factors including education, income level, gender, location etc. People who have higher income – social status- have more opportunity and

skills to use ICT and access the information more often and easily. Most of these citizens are educated. As for the gender, men in general have more opportunity to access the technology as the culture in the country give more opportunity to men than women.

Based on survey of the venues, it is found that there are more male attending public libraries than female. However, in non-urban areas, more female more uses libraries than than male users. Warintek shows a balance between male and female users.

Most of people who use public information services at the venues are educated and young and are more ICT literate than others. Those with high-income status attend public access information centers less than those having lower income status. Obviously, people with higher income status access to information through their own internet access at home or work.

In Indonesia, location is probably the most important determinant of the inequities in the country. Many islands and a widespread non-urban areas are populated mostly with those who are not offered sufficient education or employment opportunities. Tere many small to medium business located in non-urban areas selling hand-made crafts such in Pundong Bantul. It is interesting to note that most of the workers in these businesses are women. These citziens can easily be classififed as underserved with probably no formal education, IT or computer skills. As the ICT infrastructure is being very weak in tehse areas, even they had proper skills the information access venues are also very limited. Though there are some efforts by the Department of National Education in enhancing ICT infrastructure, these prove to be limited and not sufficient.

### 3.3.5 Freedom of press and expression and the right to information

What is the overall perception of freedom of press, censorship and right to information in this country?

The vision of President of Indonesia is achieving an information society and knowledge based society that is aware of the purpose and usefulness of information. The vision supported by many policy and legal frameworks. There are particular lows regulating the freedom of information for public, and the importance of ICT implementation to empower citizens through access to information.

The freedom of information in the country is getting better since Indonesia entered reform era after Soeharto. Information sources are becoming varied and increasing in number. The ICT infrastructure is becoming better than before. The Department of National Education has been developing ICT infrastructure that interconnects schools and higher education. This is increasing the number of ICT skilled students in schools and universities.

In the case of knowledge sharing, [www.ilmukomputer.com](http://www.ilmukomputer.com) is one of the leading website for sharing knowledge in Indonesia. Recently, many higher education initiatives are opening access to their information.

However, Indonesia just entered the information era, and these developments are very new but a good indicator of freedom of expression and right to information will be better in the future.



### 3.4 Charts: Information Needs, Users, and Uses

Based on the results of your research (especially user surveys and interviews with librarians and operators), complete the required data to chart the information needs of underserved communities using the following examples. Provide any explanatory comments as needed.



**Source:**

**Comments,** including comments on other inequity variables.

### 3.4.1.2 Information People Seek, by type of venue

(estimated proportion in each category, %)	Public Libraries				WARMASIF				WARINTEK			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use
Education	41	15	44	20		7	33			62		37
Health	13	18	9	5		4	3			14		8
Agriculture	8	7	8	5		5	4			33		8
Government services	5	10	4	0		8	4			8		5
Entertainment	9	25	8	30		17	12			12		24
News	13	15	11	20		26	12			25		17
Personal	6	7	4	10		16	12			20		20
Other	4	6	11	0		18	21			18		18

**Source:**

**Comments:** (Include description of "other". Suggested headings based on frequently reported topics in other research and may vary across countries).

Other :

Public library general use: culture

Public library ICT - use; Warmasif, Warintek- job findings

### 3.4.1.3 Uses of ICT, by type of venue

(estimated proportion in each category, %)	Public Libraries				WARMASIF				WARINTEK			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use
Email		15		25		25		29		21		13
Chat		11		5		11		9		17		14
Web browsing		44		30		47		38		60		58
Blogs & social networking		9				4		4		10		11
Commerce & business		14				13		5		5		20
Phone or webcam		4				0		0				
Games		6		30		2		11		5		
Other		3		10		1		9		5		18

**Source:**

**Comments:** (Include description of “other”. Suggested headings not exhaustive, based on frequently reported topics in other research and may vary across countries).

other: downloading and testing software

### 3.4.1.4 Frequency of Use for each type of venue

(estimated proportion in each category, %)	Public Libraries				WARMASIF				WARINTEK			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use
First visit	0	0	0	0		0		0		5		
Rarely (less than monthly)	4	5	8	0		4		3		10		15
Occasional (about once a month)	20	35	40	50		18		25		51		28
Regular (about 2-3 per	21	35	25	40		49		32		37		36

month)									
Frequent (about once a week)	27	15	27	10	17	35	22	27	
Daily (about every day)	28	10	28	0	12	11	11	33	

*Source:*

### 3.4.1.5 Barriers to use for each type of venue

(estimated proportion in each category, %)	Public Libraries				WARMASIF				WARINTEK			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use
Location, distance	3	1	2	1		4	4			4		2
Hours of Operation	3	1	3	1		4	3			2		2
Cost		0	0			2						1
Lack of skills/training	1	0	3			2	3			1		3
Not enough services	2	1	1	1		2	3			4		2
Not in right language	2	1	0			1						0
Not enough content	1	1	1	1		3	2					1
Other			1			2	1			2		0

**Source:**

**Comments:** (Include description of “other”. Suggested headings not exhaustive, based on frequently reported topics in other research and may vary across countries).

other: not comfortable place such as no AC, the furniture were very older.

### 3.4.2 Salient initiatives to help meet critical information needs by underserved communities

What are the most salient initiatives in the country (past, ongoing, or planned) that aim to meet the information needs of underserved communities in the country? How important are they? In what ways are they successful or not? Where can more information about them be found?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### 3.4.2.1 Past initiatives:

Ideas for developing a national information system and building an information society in Indonesia was around since early 1980. The first concept was developing a national information network. In 1989, the national government set up an institution that was responsible for managing automation system in government administration and its organizations. The first concept was applicable, appropriate and was implemented under the concept known as IPTEKnet. The next initiative was developing a national superhighway information system: the program known as Nusantara 21. However, in 1997, Indonesia was hit by economical crises and the program was stopped.

The popular initiative in Soeharto Era was Kelompencapir, which is a village oriented organization that has mainly members from people living in non-urban areas. The objective of the organization is empowerment of people in non-urban locations through providing access to information. They provide access to information through traditional information sources such as news papers, radio and television. The projects seem to have ended with the Soeharto era.

The above are perhaps the two most important initiatives which opened ways for the recent initiatives in building an ICT infrastructure and creating an able society to use the Internet and related applications and services.

#### **More information:**

“Teknologi Informasi dan Komunikasi Pilar Bangsa Indonesia Bangkit” Department of Communications and Informatics, The Government of Indonesia 2003

Interview with Expert.

#### 3.4.2.2 Ongoing initiatives:

The vision of the Government of Indonesia for developing a national Information system is now focused on building information society for the nation that is more autonomous, democratic and have better distribution of welfare. The fundamental problem in reaching this goal is not the ICT infrastructure but lack of an information culture widespread in the country. The government of Indonesia is aware that there are significant information related gaps in different regions leading to a critical problem of digital divide in Indonesia.

The process towards building an information society is presented in the blueprint of national information system, which are as follow:

1. Initiation stage( 2002-2003): stage for arranging conceptual framework, developing



boards that support the objective, and developing the blueprint of national information system.

2. Integration stage (2003-2004): stage for developing and implementing the blueprint including integration of government computer application, running pilot projects and developing the initial infrastructure.
3. Replication stage (2004-2005): implementing the pilot projects in other areas.
4. Intensification stage(2005-2010):

There are some initiatives that are arranged by Department of Communications and Informatics, Department of Research Technology, Department of National Education and many local governments for developing and adopting ICT to improve the public services and to enhance public access information venues.

The Department of Research and Technology in cooperation with the local government, higher education, and NGOs developed Warintek for creating a scientific and applied technological information network. The department funded the initial projects since 2001-2005. After the initial funding was finished, the sustainability of the program has been taken over by the local governments and higher education organisations.

Since the end of 2007, the Department of Communications and Informatics has been developing Warmasif (information society café) in cooperation with local governments, PT Pos Indonesia and some private sector organizations. For more please refer to the details in section 4.2. Venue specific assessment Warmasif.

However, the lack of ICT skilled staff in governmental sector is one of the barriers on making these projects succesful. For example, consider Yogyakarta local government initiatives: an ambitious government aiming to develop a cyber province is probably the most conscious local government that is aware of the problem. For this reason they started an ICT training centre for local government staff and public.

The effort for developing Warmasif and Warintek are aiming to provide better information to underserved communities. Warintek targets small and medium enterprises that need technological infrastructure and information, especially facilities for develeoping and eCommerce presence. The local content provided at the Warintek of local government of Bantul contains information that is relevant to underserved communities, especially people who need information about the small enterprises. The information is hopefully useful for improving on unemployment problems by helping the underserved creating successful small businesses.

***More information:***

“Teknologi Informasi dan Komunikasi Pilar Bangsa Indonesia Bangkit” Department of Communications and Informatics, The Government of Indonesia 2003

Interview with Expert.

### 3.4.2.3 *Historical trends and opportunities to serve information needs*

Based on the above, what is the general trend in the country in relation to provision of public access information services? Are there any important upcoming opportunities (for example, upcoming regulatory changes, infrastructure enhancements, etc) that can imp public access information (include services through libraries and other public information venues)?

- i. If appropriate, indicate any specifics that apply to Digital ICT services alone.

Historically, the initiatives for building a successful information society always faces problems, especially in coordination and responsibility. There has been some initiatives for creating local cyber province or districts by local governments. In Yogyakarta, the initiative for developing an integrated information portal has been implemented including digital public library networks and learning networks (websites that facilitate learning).

Public participation in developing ICT infrastructure is more extensive that using phicial venues devoted to public visits and has chairs tables and computers. There are now free internet connection in cafés, malls, universities, schools and other public spaces.

An interesting effort is RT-RW net that is operated by Ono W Purbo. RT-RW net is a community based internet access that aims to provide cheap internet connection to all. Some private companies have been donating to the project to provide and enhance public access to information via mobile community access points and mobile libraries.

The participation of private companies especially telecommunication organizations for providing telecommunication infrastructure can make significant contribution to the extensive availability of internet connection. The interviews conducted with experts, indicate that telecommunication operators can reach non –urban areas easier via settalite networks.

**Source:** *interview with expert*

### 3.4.2.4 *Planned initiatives:*

In the national context, based on interviews with experts from the Department of Communications and Informatics, it is found that the government aims to provide internet connection to all villages in Indonesia by 2009. However, there are also a number of local initiatives for developing better e-government services. Local government of Sragen has been developing internet cafés in the villages. They aim for providing internet connection for small enterprises especially batik handicrafts. Also, Local Government of Sleman has been developing mobile internet access for reaching out to the villages by making access is free for all.

After the issuance of the law on freedom of public access to information, the Department of Communications and Informatics started to develop media centres - a number of venues that provide government services related information, internet connection and ICT training. In 2008,

they will develop 25 media centre in 25 districts and 10 media centre in 10 provinces.

**More information:**

*Interview with expert and visit locations in KPDE Sragen and Bantul.*

### 3.5 Economic, Policy, and Regulatory Environment

#### 3.5.1 National and local economic environment

Describe the national and local economic environment and how it affects public access to information and communication in the country.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Based on the economical report from the Indonesia Central Bank 2007, the Indonesian economics is moving to a positive state better than before. The economies at the local regions increasingly contribute to the growth of national economy. Naturally, the economical growth will influence the investment on ICT and improve awareness of the government on enhancing the quality of public services and the access to the information.

The government tends to strengthen small and medium enterprises in many local areas. One of the objective for developing Warintek and Warmasif is providing scientific and technological information to small and medium enterprises. This objective is in line with and will contribute to the growth of ICT adoption in small and medium enterprises while the public will become more aware of the uses of ICT in business and commerce activities.

**Source:** *interview with expert*

#### 3.5.2 National and local policy (legal and regulatory) environment

Describe salient features of the policy and regulatory framework in the country (and if applicable, locally) that affect delivery and access to information (e.g. censorship, Wi-Fi bandwidth regulation, etc). What is your assessment of the general trend on this matter?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The main legal framework that influence the right to information is the law on freedom of public access to information (UU no 14 tahun 2008 on freedom of public access to information). The law was issued in April 2008. This regulates the right of people to get information that they need. Based on this law, the department of communication and informatics is supposed to develop media centers that are spread around the whole country. Media centre is a venue that provides information, ICT training centre and internet connection. The venues will be equipped with modern technology including multimedia technology, and hopefully very user friendly.

The government issued some policies to boost the ICT infrastructure and reaching the goal of building the information society. Based on the experiences, the government always aimed to involve the public to develop such policies. As an example, the government changed their minds for censoring you tube after some ICT professionals and organizations gave suggestions

to the government not to do it.

The government also regulates on frequency license, the post, standardization, and telecommunication. The researchers found the regulation info on the website of Ministry of Communications and Informatics, but the detailed process and content was not online.

*Source: interview with expert(s)*

### 3.5.3 Regional and international policy (legal and regulatory) environment

Describe salient features of policy and regulatory framework in the region and internationally that affect the delivery of public access to information and communication in the country. What is your assessment of the general trend on this matter?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The regional policies do affect the ICT development in Indonesia but most of the influence comes with closer contacts with the NGOs, donors and private companies. The remarks of United Nations Secretary General at the Opening Plenary Meeting of WSIS II pointed out the need for providing public access to information through ICT seems to have directly influenced the government of Indonesia and movements towards building a successful information society started to be important in government's agenda.

Some multinational companies also directly influence the ICT developments and the projects. Some of them got involved in collaborations with local governments to develop ICT training centers and increase the awareness on the usefulness of ICT. For example, Intel supported ICT training centre in Bantul, and Microsoft supported the implementation of digital government services and ICT training centre for public in Yogyakarta.

*Source:*

### 3.6 Collaboration Prices and Opportunities Across Venues

Linkages and collaboration between different types of venues was identified as a **strong emerging theme in the preliminary analysis**. Please provide as much detail as possible to help understand existing and potential collaboration opportunities and linkages among and between public access venues, and how they can improve the quality and relevance of information access to underserved communities.

- i. Include reference to existing as well as potential collaboration opportunities.
- ii. If appropriate, indicate any specifics that apply to Digital ICT services alone.

There a number of collaborations among the venues chosen. For example, collaboration between public library, higher education libraries and Warintek may be summarized as follows:

1. Warintek is a program launched by the Department of Research and Technology for providing scientific and technological information to public. The Department funded the program during 2001-2005.

2. Then the program effort empowered local public libraries, documentation unit, higher education/school libraries and some NGOs which had presence on the site of Warintek. They provide opportunities for access to information.
3. After the funding from Department of Research and Technology was finished, the sustainability of the programs have been taken over by the local government and higher education organizations. They have been developing many local content and adding more services.

The other example is Warmasif program that is a collaborative program between the Department of Communication and Informatics, PT Post Indonesia, and Local Governments.

1. Since the end of 2007, the department of Informatics has been developing Warmasif program for providing public access information venues all around of the country. The Department fund the ICT infrastructure and websites of Warmasif. The department aims to establish Warmasif in all districts of the country by 2010.
2. PT Pos Indonesia (Post Office) provides space and the management of the local Warmasifs.
3. Local government collaborate with these activities by developing the local content for Warmasif that may be useful for the public.

A particular example is Yogyakarta Digital Government Services program, which is a collaborative program for developing local information portal in Yogyakarta. The program aims for interconnecting public libraries, higher education and school libraries, information plaza ( information café that was provided by the local government), and some learning group's sites. The ambitious goal is developing integrated information portal of Yogyakarta.

### 3.7 Buzz For: Public and Government Perceptions About What is "Cool"

The "buzz for", i.e., public and government perceptions about what is "cool" in relation to public access venues, where to invest resources, what places to hang out in, was identified as a **strong emerging theme in the preliminary analysis**. Please provide as much detail as possible to help understand how these perceptions about what is "cool" offer new opportunities or obstacles to strengthening public access information venues in the country.

Perhaps all the buzz in the country is around the ambitious goal of the government making a successful information society real by 2015. The government have been developing many public information access venues and improving the existing public access. Based on our observation, there is a trend to provide public access information venues that are comfortable, easy to use, eye catching and equipped with modern technologies, applications and services.

The initiative from Ani Yudhoyono for developing mobil pintar (a mobile venue for public access to information that was developed as a comfortable place for learning), and motor pintar( similar to mobil pintar, but motor pintar use motorcycle) for providing public access to educational information boost some similar initiatives that are launched by many local governments and sometimes by public. In Yogyakarta , the local government is developing Taman Pintar, "science techno park", equipped with modern technology, for providing venues infrastructure for access to learning and educational information. These initiatives should

improve the awareness of people to attend public information access venues and make good use of them.

### 3.8 Legitimate Uses

The difference between “legitimate” or “non-trivial” uses of information in public access venues was identified as a **strong emerging theme in the preliminary analysis**. For example, uses of social networking spaces (Facebook and similar), blogs, chat, video games, as well as opportunities to download, install and run open source software applications in public access computers poses new challenges to traditional notions of “legitimate” information needs for development, and “trivial” uses of information for development... Please provide as much detail as possible to help understand how local definitions and restrictions based on what is “legitimate” or “non-trivial” information or communication prices offer new opportunities or barriers to public access information venues in the country.

In general, there is no restriction to use ICT for entertainment, chatting or some social networking in public libraries, Warmasif or Warintek. They banned some pornography websites.

### 3.9 Shifting Media Landscape

The ever-changing media landscape and the new opportunities brought about by new media such as mobile phones, SMS, GPS, and even renewed roles for community radio open, was a **strong emerging theme in the preliminary analysis**. Please provide as much detail as possible to help understand how these new technologies and media offer new opportunities or barriers to public access information venues in the country.

#### 3.9.1 Mobile phones

If appropriate, describe salient uses of mobile phones, text messaging, SMS and similar technologies, in relation to public access information venues and information needs of underserved communities.

The high penetration of mobile phones in the country directly influences how information is being accessed and distributed among the members of the population. This in turn forces government organizations to use this new technology in informing or interacting with the public. Some units of national government and local governments implemented interactive facilities between the government and public using mobile technologies, especially SMS. The members of the public can also send SMS directly to the government officials. This new way for interaction has many implications for improving the government organizations, saving time and money, creating e-participation and influencing the public policies.

#### 3.9.2 Web 2.0 tools and use

If appropriate, describe any salient uses of Web 2.0 tools among users of ICT in public access venues. (Web 2.0 refers to evolution of web-based communities and hosted services, such as social-networking sites, wikis, blogs and others. [Wikipedia](#)).

Some government websites implemented blog facilities for their citizens. However, this seems to be early and advanced for those large groups of members of the public who have no formal training in ICTS. However, the use of ICT for developing web based communities will improve the public and in turn will affect the ICT developments of the future. Though at a small scale social networking is also becoming more more popular in Indonesia.

#### 3.9.3 Combination of different media

If appropriate, describe creative ways in which different media are being combined to meet information needs

of underserved communities, and the ways they affect public access venues. Different media include community radio and TV, other print media, street theatre, songs, etc.

Researchers presume that there is a very limited use of combination of different media in Indonesia. We don't have enough data about this.

**3.9.4 Other shifting media landscape examples**

If appropriate, describe other new features and prices in the media landscape that affect public information venues and information needs of underserved communities.

This would be a good place to discuss innovative prices on content creation and production of new messages, media, information and knowledge that are not described elsewhere in this report.

Based on observations, the taman pintar (science techno park, a venue that provides scientific information and developed to serve as a place for learning) and plasa informasi seem to be good examples of implementing any media (other than computers) for public information venues. However, these two efforts are serving more as educational venues for students for learning and playing. In the future, they should be more enhanced and be more equipped with modern technologies especially multimedia offering the latest examples of technologies for information access.

**3.10 Health Information Needs**

This is an extra contribution to other research on health information needs going on at the University of Washington, based on willing respondents to last two questions on user surveys at the public access venues.

**3.10.1 Sources of health information**

The researcher did not collect data on this.

Where are people most successful at locating useful health information for themselves or their family (% of respondents across all venues):

clinic/hospital	friend	health worker	public access venue (library, community center, etc)
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**Comments:** describe

**3.10.2 Types of health information**

What types of health information do they have the most difficulty finding (% of respondents across all venues)?

disease prevention	how to locate healthcare	child health information	remedies/drugs	Other
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**Comments:**

## 4 Venue-Specific Assessments

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Complete one full assessment for each type of venue studied in the country.

### 4.1 Venue 1: Public Libraries

#### 4.1.1 Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

Indonesia National library was established 1980 under the Department of Education and Culture. At the beginning, National Library was an integration of 4 big libraries in Jakarta. In 1987, National library moved to its new building on the street of Jln. Salemba Raya, Jakarta. The new building also had a main administrative office for the national library.

Here is some background information about legal procedures and government policies about the public libraries in Indonesia. Late 1989, the government of Indonesia implemented a law to reorganize the National Library. With the new law, the national library became an institution reporting directly to the President. The national library now had a new authority and it was not under the Department of Education and Culture.

In 2002, the Government issued a decree to regulate all library related occupations, including qualified librarians, and circulation personnel. In 2007, the Government of Indonesia issued, yet another bill, (UU no 43 tahun 2007), to redefine the objectives, and functions of the libraries. The 2007 bill also pointed out how to delegate the authority and responsibility for the administration and maintenance.

Today, the total number of public libraries in Indonesia is 14.516. The public libraries are mainly located in Jakarta, the capital of Indonesia. But every province and district and many villages also have public libraries. There are three types of public libraries in Indonesia:

1. Traditional library: In general, the library located in small towns and villages.
2. Semi-modern library: in general, the library located in cities. It has adapted ICT, but without the online services.
3. Modern Library: In general, located in big cities or in higher education institutions. It has ICT and online services.

Based on our interviews, many of public libraries with Warintek provide online services. They provide content for local use, such as, application software and programs.



Mobil Pintar and Motor Pintar are new initiatives to provide access to educational information. Mobil Pintar (smart car) is a mini-van type vehicle that is used as a venue to provide access to information. Motor Pintar (smart motorcycle) is a venue doing the same work. They are designed as venues equipped with modern technology, to facilitate learning while playing. These are new models of mobile public libraries with the focus on educational information. There are many of mobile pintar and motor pintar operating in many provinces.

#### 4.1.2 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

Public libraries are the most widely available public information access centers in the country. The libraries are found in every province, district and in many villages. The district public libraries reaches some remote villages through mobile libraries.

Based on our site visits in 3 locations at Yogyakarta, we believe that the centre can be improved in terms of the facility management and online services infrastructure. We think that the centre has not yet adapted ICT optimally. We noticed an effort to develop internet access and online services in Yogyakarta Public Library. They were planning to develop a network among all Yogyakarta public libraries and higher education public libraries.

In general, users are charged a very low nominal fee for membership. Based on our interviews, only at Bantul Public Library all services are free of charge.

##### 4.1.2.1 Physical access

Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Public libraries are generally located in provinces and districts. They are often located conveniently on main streets. Based on our interviews, each of public libraries has a mobile library to reach remote areas (non-urban). More over, Bantul Public Library has a small mobile library on a motorcycle. Although small in size, this mobile library can reach remote areas.

##### 4.1.2.2 Appropriate technology and services

Describe how appropriate the technologies; services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are a limited number of modern libraries in Indonesia. Based on our site visit at Yogyakarta, the public library is a semi-modern public library. It provides an electronic catalog. However we did not find any online services.

Bantul public library provides free internet access and hotspots. Currently, the authorities are planning to develop a digital library that is embedded with the Warintek program. The similar situation is also considered for the Sleman Public Library.

#### *4.1.2.3 Affordability*

Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

In general, most public libraries charge a small fee for membership. The fee is affordable. When we interviewed Bantul Public Library, we found out that they did not charge any fees. All of their services are free, including the mobile services.

The libraries accept donations from people.

#### *4.1.2.4 Fees for services*

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

There is only a membership fee charged by the public libraries. However, each public library has a different amount. Some public libraries, in non-urban areas, have no fees at all for their services. In this report, we used Yogyakarta Public Library as a case study case for fees.

Indicate amount in local currency: Rp 3.000,00 as membership fee that valid for 1 year.

Equivalent in US Dollars: 0.3 US \$

Date of estimate 21-August 2008.

Indonesia currency name: Rupiah

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

#### *4.1.2.5 Geographic distribution*

What is the distribution of the venues in terms of their geographic location?

Complement any details not already included in section 2.1: Venue Selection.

The venues are distributed in all areas of the country. Based on a research paper presented in world library and information congress in 2003; there is 1 national library, 25 national provincial libraries, 519 universities library, 12,620 school libraries, 769 public libraries in cities and 800 private libraries.

Local governments have developed mobile libraries to reach remote areas.

#### 4.1.2.5.1 Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Downloaded from [www.slt4limboto.netfirms.com/provinsi.jpg](http://www.slt4limboto.netfirms.com/provinsi.jpg) at 21 August 2008



Description of map:

Indonesia consists of 33 provinces and more than 400 districts. The national library is located in Jakarta Province, the capital of Indonesia. There are 25 provinces that have province public libraries. 8 provinces do not yet have a province public library: Kepulauan Riau, Bangka Belitung, Gorontalo, Maluku, Utara, Papua, Papua Barat, and Sulawesi Barat.

#### 4.1.2.6 Other factors affecting access

Other factors that affect equitable access to public information in this type of venue, not covered above?  
If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### 4.1.3 Capacity and relevance

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Each public and higher education library has a librarian appointed by government. The government pays the salary of librarians. Sometimes the library recruits part time staff or short-term trainers based on local needs. As there is a need for well-trained librarians, some public libraries need librarianship training to enhance the capacity of their librarians.

Based on our interviews, users of non-urban libraries have a high school education or less. However the users of urban libraries are mostly university students. Less high school students are using urban libraries.

While it is possible to find higher education institutions in every parts of the country, the universities are mostly located in urban areas. For this reason, it may well be that the libraries provide relevant and locally need information.

In 1998, the beginning of a reform era, the issues of democracy and human rights became popular. Many people wanted to have access to information to inquire about the human rights. To meet the research demand, the government couldn't but give priority to providing information access through public libraries.

Today, some of the local government units have been developing digital libraries. These efforts are parallel to many other similar government programs, including Warintek and Jardiknas.

##### 4.1.3.1 Staff size

How many people work in a typical facility for this type of venue? (Full time-equivalent employees or contractors; describe any significant variations; i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are full-time permanent staff and part time or temporary (seasonal) staff depending on needs of the libraries. Larger libraries may have combination of the three. Based on the data of National Library, in 1999 the national library had 700 staff members.

The typical organizational structure includes a deputy of divining and information services, and another deputy for the library resources and a secretariat. The national library offers

accreditation to librarian training centers.

The government appoints most of the public library staff.

#### 4.1.3.2 Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use public access to information and communication services offered in this venue? Differentiate by applicable Equity of Service variables (Form 1c).

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.
- (ii) For Public Libraries, indicate if Library School training is available and/or required for librarians.

Based on our interview, librarians are available in each public library, be province or district. However, The public libraries lack the skilled ICT personnel in most branches.

There are 17 colleges that offer degree or certificate in librarianship. There are 10 schools that offer sarjana degree (similar to BA) in librarianship. There are only two graduate schools offering MA in librarianship. Unfortunately, It is not possible to earn a doctoral degree in librarianship, in Indonesia.

In addition to schools offering degrees in librarianship, the national library itself also offers many training programs related to library work.

Source of information: Labibah Zain & John E. Leide, "Pendidikan Perpustakaan dan Kajian Informasi di Indonesia"

[www.pusdiklat.pnri.go.id](http://www.pusdiklat.pnri.go.id) accessed 15 august 2008.

#### 4.1.3.3 Services offered

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

*Services Offered*

*Comments*

1.	lend books, magazine	Available in all of public libraries
2.	internet access	There are a few of public libraries that provide internet access. National public library and some local public libraries that embedded with Warintek program provide internet access.
3.	automated system	Very few of public library use automated system

4.	Online catalogs	Very few of public libraries provide them.
5.	Mobile library	Most of public library funded by national government, and local government provide mobile libraries to reach remote areas
6.	E-journal	Most of higher education public libraries provide e - journal
7.	Mobil pintar, motor pintar	Some of public libraries provide mobil pintar and motor pintar to provide
8.	digital library	There are 148 digital libraries. ( <a href="http://digilib.pnri.go.id/in/dlPerpus.aspx">http://digilib.pnri.go.id/in/dlPerpus.aspx</a> accessed 15 august 2008)

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

#### *4.1.3.4 Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are numerous efforts to enhance the services to underserved communities. For example, initiatives to develop mobile libraries for people in remote areas. Mobil pintar and motor pintar are similar programs but they are modern and entertaining.

However the impacts of several programs are yet to be seen at grassroots level where they are really needed and for whose life they are intended to improve.

#### *4.1.3.5 Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### **Available Content:**

Most of the contents are books, scientific journals, bulletins, reports, monographs and some digital content.

#### **Other Content Needed:**

Based on interviews with library operators, people are mostly inquiring about recent

developments in applied technology.

**Local Initiatives to build needed content:**

There are some local initiatives to build a local content. The local initiatives are pushed by many local governments such as Bantul, Sleman and Yogyakarta.

*Source: interview with library operator.*

*4.1.3.6 Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

All of the services run in Bahasa Indonesia. (Indonesian Language)

*4.1.3.7 Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Refer to section 3.4 Charts: Information Needs and complement here as needed.

Based on the interviews, most of people in urban and non-urban areas are seeking educational information. Library operators say that the users are mostly students and searching information related to how they can further their studies.

*4.1.3.8 Number, type, and frequency of users*

Refer to section 3.4 Charts: Information Needs. Complement here as needed.

Educational information is most commonly sought, then comes the information about entertainment. Although, there are many other types of information searched by library patrons; education, school, study, and entertainment are the most frequently used search terms. ICT in the libraries is used for mostly entertainment related news.

*4.1.3.9 Users Capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The goal of the public libraries is to provide public information access. Overall user capacity is high. However, the reading frequency habits of the low socio-economic segment is also low. There fore, some initiatives even at the grassroots level are not effective.

#### *4.1.3.10 Training courses for users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

Training courses:

ICT specific training courses:

There are no training course of user in public library.

#### *4.1.3.11 Integration into daily routines*

How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The regular services of the public library are available, but people sometimes do not have time to visit the venues. The government and some NGO have been developing digital libraries to provide easy access.

The other problem is reaching the people in remote areas. As explained above, national government and some local governments have been developing mobile libraries to address the distant citizens. Mobil pintar and motor pintar are eye catching new model of mobile libraries. They are equipped with more modern technology.

#### *4.1.3.12 Users perceptions about the venue*

What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself: i.e., what do people generally think about libraries? Are they places that are “cool” or “only for elites” etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue...

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

As libraries are government public services, most of people think that the government is not sparing enough funding for the public libraries. The government is more concerned to deal with the economic and political problems the country is facing. Despite all, people in Indonesia value education and the public libraries as one of its resource..

#### *4.1.3.13 Social appropriation of information and generation of new knowledge*

What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).

If relevant, indicate any specifics that apply to Digital ICT services alone.

Web sites of digital libraries provide discussion forums. People can use forums to share their knowledge and interact with each other. We think that the public library must publicize their website, making the patrons aware about what tools out for them. We found out that even the



public library organization has little info to the discussion forum. It would be a plus if they focus on improving their on line services.

#### *4.1.3.14 Trust, safety, and privacy*

What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?

In general, there is a positive attitude towards using online services in Indonesia. Although, there are a few isolated cases of abuse, teachers and students are still comfortable using the on line services.

#### *4.1.3.15 Gaps and opportunities in information and services offered*

What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)

We found two opportunity gaps in information and services offered. First, people from underserved communities need more information to help them improve their quality of life. However, the underserved communities do not have time to read because of daily survival. We think the venues can use multimedia technology to provide information to underserved communities. We believe that multimedia may be easier to follow and understand.

The second gap is, that most students are too young and young people perceive that a public library is not a comfortable place to be. We think that the public library must improve their capacity to adapt ICT to provide information access for young people. Especially, the venues must improve their website quality.

### **4.1.4 Enabling environment**

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

#### *4.1.4.1 Local and national economy*

Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Based on Indonesia Central Bank Economic Report 2007, Indonesia's economic growth is 6.39 %. It has been the best condition since economic the crises that hit the country in late 90's.

However, public libraries in Indonesia still are not a priority in the government's agenda. Compared with its neighboring ASEAN countries, libraries development in Indonesia is still far behind. Libraries are many in numbers, however the facilities and books collection sometimes do not meet the demand.

#### *4.1.4.2 Legal and regulatory framework*

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

About 20 % of the national budget is for education sector. Public libraries are a part of educational resources people need to get information. The major law regulating public libraries is “UU no 43 tahun 2007” ( decree no 43, year 2007). It regulates all aspects of public libraries in the country.

After decentralization era, the local governments have been playing an important role in funding educational resources. The local governments fund many public libraries. For example, local government of Yogyakarta City has been developing “taman Pintar” to provide educational venues that more eye catching, comfortable and equipped with modern technology. Taman pintar is a venue where children play and learn.

#### *4.1.4.3 Political will and public support*

What is the level of political will and public support for this type of venue? (refer to and complement section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The first Lady of Indonesia initiated mobil pintar, motor pintar and rumah pintar to provide public information access venues that are more eye-catching, comfortable and equipped with modern technology. Many private companies support the programs by donating cars or motorcycles.

#### *4.1.4.4 Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

Based on the Library law, year 2007, article 43, there are five types of libraries in Indonesia: national library, public library, school library, higher education library and private library. National library institute offer accreditation to libraries in Indonesia.

#### *4.1.4.5 Partnerships*

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Some initiatives have been developed among the private companies and local governments to

improve the quality of this venue. The following are some participating entities: The wondering book foundation, Perpustakaan Prof. Doddy Tisna Sanjaya, Cocacola Foundation, Sanggar Aka, and donations from several manufacturing companies for mobile libraries.

#### 4.1.4.6 Other environment factors

Other factors in the environment that affect access and use of information in this kind of venue, not covered above?

none

### 4.1.5 For publicly funded venues only: Revenue streams

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

#### 4.1.5.1 Budget

What is the total budget for this public access venue system (applies especially for libraries, answer for other venues if applicable and if available)? ??? Any data info? Please use xe.com

Total Budget for Fiscal Year 2006

Local currency name Rupiah amount (local currency) Rp 139.432.470.081,00

Approx. equivalent in USD 14.408.646

based on exchange rate of Rp 9677,00 per USD on date 21 August 2008.

#### 4.1.5.2 Relative size of budget

How large (or small) is this budget in relation to other funding streams? (this is a way to show, in financial terms, how much the government cares about information and public access as compared to a variety of other issues in the country).

Relative Size of Budget for same year	Total budget (local currency)	Comments
<b>Total national budget<sup>2</sup></b>	Rp. 647,67 Trilyun/ Rp 647.670.000.000.000,00	
<b>Education</b>	Rp 36,7 triliun/Rp 36.700.000.000.000,00	
<b>Other (name)</b>		
<b>Public libraries<sup>1</sup></b>	Rp 139.432.470.081,00	based on output of budget inspection report of National Public Library 2006.

#### Other Comments:

1. BPK report on Indonesia National Library 2006 downloaded from [www.bpk.go.id/doc/hapsem/2007i/disc1/APBN/064\\_Perpustakaan Nasional LK.pdf](http://www.bpk.go.id/doc/hapsem/2007i/disc1/APBN/064_Perpustakaan_Nasional_LK.pdf) - 16 August 2008.
2. <http://www.perbendaharaan.go.id/modul/utama/index.php?id=1739> accessed 16 august 2008\_

#### 4.1.5.3 Sources of funding

What are the sources of funding for this public access venue system?

Sources of funding:	Approximate % of total budget	Comments
Government sources:	100 %	
International donors:		
National donors:		
User fees/services:		

#### Other Comments:

We don't have enough data about national or international donors.

#### 4.1.5.4 Paths and flows of resources

How do resources get allocated and disbursed to the actual venues? For the principal funders, and especially for the public sources, what is the flow of funds? How are the funds raised (what tax stream), what path do the tax streams flow before they get to the specific venues? Who makes decisions about this funding?

Library is an educational resource for providing educational information. Resources of public library comes from various sources: National government, including national library of Indonesia and Department of National education funds for school and higher education library; local governments' funds for local public libraries; and donations from the private companies.

#### 4.1.5.5 Fees and cost recovery

Describe if there are user fees or any other type of cost recovery. How does it affect service delivery and usage?

In general, the fee is only for membership. There are no fees for services. Moreover in Bantul, membership and services are free.

#### 4.1.5.6 Cost categories

What are the main cost categories in the operation of this kind of venue? (% of total annual budget)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cost Categories for Operation:	Approximate % of total budget	Comments
Staff (salaries, benefits)	22 %	
Building infrastructure	35 %	
Utilities	43 %	
Staff Training		
Computers/technology		
Total	100%	

**Other Comments:** where is the budget for ICT – computers etc? Building and infrastructure budget is included ICT-computers budget.

#### 4.1.5.7 Recent changes and future trends

Describe any recent changes and anticipated future trends in the funding and revenue streams for this type of venue in the country. Have funding levels risen or decreased dramatically over the past few years? What is the outlook for the foreseeable future?

The interesting point in providing public information access venues is an effort to improve the quality of venue, to make it more comfortable, and eye catching; equipped with modern technology, especially ICT. As an example, the effort in developing mobil pintar, motor pintar, rumah pintar and taman pintar. ( smart car, smart motorcycle, smart home, smart park)

#### 4.1.6 Case example for public libraries

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

Insert Case Example and Photo here.

Yogyakarta located in Java Island. Please see the map below. There are many universities and schools in Yogyakarta. That's why it is known as a city of education and culture .The local government of Yogyakarta has developed an information networking and maintains many public information venues.





The pictures below shows Information plaza. The information plaza is a building that equipped with modern technology and more comfortable to learning. People can access more information such as government report, internet access, books and magazine also some local content.



The picture sbelow shows some activities in taman pintar and Yogyakarta Public library. Taman

pintar is more comfortable for students to learn and play.



The picture below shows an activity in Yogyakarta Public library.





## 5 Venue-Specific Assessments (cont.)

### 4.2. Venue 2: Information Society Café (Warung Masyarakat Informasi/ WARMASIF)

#### 4.2.1. Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

WARMASIF is another example of Community Access Point (CAP). The organization was founded in 2005 by a collaboration between the Information and Communication Department (Indonesian Government), PT. Indonesian Post Office, and the local governments in cities. From 2005 to April 12<sup>th</sup> 2008, there has been 63 Warmasif locations established in 63 post offices in urban and non-urban areas within Indonesia. ([www.warmasif.co.id](http://www.warmasif.co.id))

Warmasif's objective is to help to decrease the digital divide in Indonesian society. In other words, the organization aims to accelerate the accessibility of information within Indonesia, with a special emphasis on persons who are unable to afford or have knowledge of ICT. Every Warmasif provides three services: 1) E-commerce for small to medium businesses, 2) E-library for students, teachers and the general public, and 3) E-health information for the general public.

As a public information centre, Warmasif allows the public to access the Internet, general computer usage, printing, transferring digital data (photos and documents), etc. In addition, small to medium businesses (UKM/Usaha Kecil Menengah) are able to upload photos of their products on Warmasif's website at no cost. Customers who are interested with these products can purchase through Warmasif's website and also pay via the post office, in which Warmasif is established.

Based on our survey, the number of Warmasif users is observed to be low. The underprivileged community is still unaware of the initiative. In order for further awareness of Warmasif, the organization, the Indonesian Government and PT. Indonesian Post Offices should announce and publish Warmasif through mainstream media, such as newspapers, television or the radio, in order to get wide coverage to those in need of this service. However, despite the unavailability of advertisements of Warmasif, another problem plagues the program. The underprivileged have a misconception of the high cost of computers and therefore, generalize that only people with medium or high social status are able to use the technology. Thus, the Government should also provide free training and courses to dispel the myth, as well as educate the underprivileged of the benefits of ICT usage in this day and age.

The survey also finds that those who utilized ICT services at Warmasif primarily search for information pertaining to news, personal information as well as others, such as job vacancies.

Although, there is a small number who searched for information about health. A few users have even used the service towards commerce and business. However, the general findings of the survey concluded that Warmasif's services has not reached its full potential by users.

#### 4.2.2. Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

##### *4.2.2.1. Physical access*

Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Indonesia embodies 27 provinces. Warmasif venues are allocated in each province of the country. These Warmasif venues are located in post offices. In total, there are 63 venues that are funded by the Department of Information and Communication from 2005 to 2008. There are 26 venues located in urban areas, whereas 37 venues are located in non-urban areas.

In the future, Warmasif hopes to increase the number of venues. The government plans to establish Warmasif in each city's post office throughout the country by 2010.

##### *4.2.2.2. Appropriate technology and services*

Describe how appropriate the technologies, services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Each Warmasif venue contains a room in which Internet-enabled computers, a printer, scanner, card reader and other hardware are provided. Users are able to access the Internet, print documents, transfer digital data (photos and documents), etc. at a nominal fee.

For those who own small to medium businesses, Warmasif allows these businesses to upload photos of their products on the main website ([www.warmasif.co.id](http://www.warmasif.co.id)) at no cost.

In urban areas, Warmasif is open from 8am to 4pm, while in non-urban areas, the venues are open from 8am to 2pm.

##### *4.2.2.3. Affordability*

Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Generally, the price Warmasif charges to users is usually cheaper than any other internet cafes. The cost for Internet users is Rp 3.000 per hour, while other services are also below cost compared to internet cafes.

For people who have small medium business, they can put (upload) their products on the warmasif web site without any cost (free).

#### 4.2.2.4. Fees for services

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

Indicate amount in local currency Rp. 9.215,-

Equivalent in US Dollars: 1 US\$

Date of estimate August 15<sup>th</sup> 2008

and local currency name Rupiah

#### 4.2.2.5. Geographic distribution

What is the distribution of the venues in terms of their geographic location?

As mentioned above, there are 63 venues distributed in every province in Indonesia. There are 26 venues located in urban areas, whereas 37 venues are located in non-urban areas.

The distribution of 63 Warmasif in the 27 provinces are as follows:

Tabel. 1. The Distribution of Warmasif Venues in Indonesia

						Total
<b>Java</b>	<b>Sumatra</b>	<b>Kalimantan</b>	<b>Sulawesi</b>	<b>Irian Jaya</b>	Others	Urban area
Semarang	Palembang	Palangkaraya	Manado	Jayapura	Ambon	
Bandung	Medan	Pontianak	Palu		Kupang	
Yogyakarta	Banda Aceh	Banjarmasin	Kendari		Denpasar	
Surabaya	Padang	Samarinda				
Jakarta Utara	Pekan Baru	Balikpapan				
Jakarta Barat	Jambi					
	Bengkulu					
	Bandar Lampung					
6	8	5	3	1	3	26

						Total
<b>Java</b>	<b>Sumatra</b>	<b>Kalimantan</b>	<b>Sulawesi</b>	<b>Irian Jaya</b>	Others	Non Urban area
Serang	Lhokseumawe	Singkawang	Berau	Ternate	Sumbawa	
Tanggamus	Samosir	Makassar	Gorontalo	Biak	Mataram	
Pekalongan	Kabanjahe			Merauke		
Curup	Serdang					
Garut	Bukit Tinggi					
Tasikmalaya	Pasaman Barat					
Kuningan	Dumai					
Bekasi	Batam					
Karawang	Tanjung Pinang					
Purwakarta	Muara Bulian					
Malang	Pangkal Pinang					
Blitar	Sungai Liat					
Kediri	Metro					
	Kayu Agung					
	Sekayu					
13	15	2	2	3	2	<b>37</b>

#### 4.2.2.5.1. Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Description of map:

Indonesia encompasses five large islands, which include Sumatra, Java, Kalimantan, Sulawesi, and Irian Jaya. 27 provinces are spread throughout the islands and within these, 63 Warmasif locations.

*4.2.2.6. Other factors affecting access*

Other factors that affect equitable access to public information in this type of venue, not covered above?  
If appropriate, indicate any specifics that apply to Digital ICT services alone.

none

*4.2.3. Capacity and relevance*

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Being funded by Information and Communication Department (Indonesian Government), PT. Indonesian Post Office, and the Local Government, each of these bodies contribute resources to each Warmasif location:

- 1. **Ministry of Information and Communication Technology** provides 3 personal computers, 1 unit server, 1 digital camera, 1 printer and 1 scanner.
- 2. The **Local Government** has the responsibility to announce/promote the venue, to support ICT training for small and medium business, to provide the content of the main website, which include e-commerce for small medium enterprises, e-health information services, and the e-library.
- 3. **PT Indonesian Post Office** has the responsibility to provide room and facilities, maintain hardware and software, provide a telephone line, Internet connection, and update data. In other words, the post office’s main task is to manage Warmasif.

Both the post office and the Department of Information & Communication are concerned with communication and information, making Warmasif a relevant mission. With their hopes of Warmasif becoming a part of the public’s daily routine, the integration of the venue within a post office is strategic.

*4.2.3.1. Staff size*

How many people work in a typical facility for this type of venue? (full time-equivalent employees or contractors; describe any significant variations, i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The number of staff depends on the services offered within each Warmasif. The locations that have few turnouts are equipped with one staff member; however those locations that are busy are staffed with two or three persons. These staff is mostly full-time.

#### 4.2.3.2. Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use public access to information and communication services offered in this venue? Differentiate by applicable Equity of Service variables (Form 1c).

(iii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

(iv) For Public Libraries, indicate if Library School training is available and/or required for librarians.

Most of the Warmasif staff is trained by the Information and Communication Department for maintaining and operating the venue. They have to have skill and general knowledge of ICT, in order to maintain and manage Warmasif. Many of them have undergone ICT training courses in in level operator (trainee can use Internet access) and in level administrator (trainee can manage the warmasif) .

#### 4.2.3.3. Services offered

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

##### Services Offered

##### Comments

9. Internet access

All of Warmasif offer internet access.

10. Web site for e-business transaction

[www.warmasif.co.id](http://www.warmasif.co.id) can be used to sell and buy products. The small medium business can promote their products on the web site, such as batik, handy crafts, food, etc.

11. Web site for e-library

Through [www.warmasif.co.id](http://www.warmasif.co.id) users such as students, teacher, lecturer, and all society are able to access varying types of literature.

12. Web site for e-health

People are able to retrieve information about health through the Warmasif website. Users can search through relevant health information, such as current news, articles pertaining to health, list of health institutions, health regulations, health catalogs, etc.

13. PC Rental

All Warmasif locations rent computers to users.

14. Transfer data

Users can transfer digital data.

15. Printing document

Users can print documents.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

The salient services by warmasif:

Warmasif Malang has been chosen as a model of a successful Warmasif. Many underprivileged people have accessed ICT in this location. In addition, there is a private company (PT Nurama Indotama), which is involved as a partner to develop the network infrastructure. The partnership aims to improve the service quality in order to meet the satisfaction of the user.

*4.2.3.4. Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Each Warmasif still does not have programs specially intended to reach underprivileged communities.

*4.2.3.5. Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

**Available Content:**

The main Warmasif website is [www.warmasif.co.id](http://www.warmasif.co.id), however each location is able to upload its own local content into the website. There are hyperlinks that link users in every Warmasif to the 63 different locations through the country.

In addition, Warmasif also provides health information. The health experts that manage the content are also available for consultations on the web.

Warmasif has an extensive e-library. Users can gain information from links such as technology, economic, physics, agriculture, technology, medicine plant, history, general knowledge, and so on. There are administrators and experts who manage this content.

**Other Content Needed:**

**Local Initiatives to build needed content:**

*4.2.3.6. Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)



If appropriate, indicate any specifics that apply to Digital ICT services alone.

All of the content is available in the Indonesian Language, so people have no difficulties to access the Warmasif website to get information on health, education, commerce business, and so on.

*4.2.3.7. Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(ii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Warmasif is predominantly for Internet access usage. Most of the public that go to a Warmasif have the intent to use the Internet, but there are the few that use the locations other services, such as general computer use, printing documents or transferring digital data.

Among the various type of the Internet access, web browsing is ranked at the top (47% in urban areas, 38% in non-urban areas) followed by email (25% urban areas, 29% non urban areas).

*4.2.3.8. Number, type, and frequency of users*

The type of users who access the Internet in a Warmasif can be described as follows: Most users (70%) are between 15 to 35 years of age, 60% male, and more than 60% are from medium social status. In the urban areas, most of the users' education level is from college or university. Whereas in non-urban areas, most users have an education level up to high school. There isn't a user who does not have a formal education that uses the ICT services in a Warmasif. Perhaps, underprivileged people often think that computers are expensive and are generally used by people with medium or high social status.

There are a varied number of users who access the Internet a day, 5 to 25 users per day, depending on location. In Warmasif Surabaya there are about five users per day, compared to in Malang, where they see 25 users a day.

Most users frequent the location on a regular basis, about 2 to 3 times a month, regardless of the location being in an urban or non-urban area

However, based on the survey, Warmasif still has not reached the underprivileged population.

#### *4.2.3.9. Users capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

In urban areas, the overall user capacity is good because most of the users have a university education. On the other hand, in the non-urban areas, the user capacity is quite good as well because most have a high school education.

There is not one user that does not have a formal education that utilizes Warmasif. Perceptions that computers are expensive and those who use them are of high or medium social status still stand within the underprivileged community. Moreover, the knowledge of ICT is also lacking.

#### *4.2.3.10. Training Courses for Users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

Up to now, there are no training courses for users in each Warmasif. However, based on a survey, the need for free training for the underprivileged on the usage of ICT is needed. The purpose of this training is to give knowledge and skill on how to use ICT and understand the benefits of ICT.

#### *4.2.3.11. Integration into daily routines*

How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

For users who have high school and university educational background, it is easy for them to integrate the information and services offered in the Warmasif into their daily lives because they know how to use ICT and access the Internet. In addition, the Warmasif is located in the strategic locations (post office), where it can easily be reached by public transportation.

However, it is rather difficult for people who have only elementary education or no formal educational because they usually do not know how to use ICT and access the Internet. The solution is to give them free training about how to use ICT and access Internet, and also give them the knowledge on the benefits of ICT.

#### 4.2.3.12. *Users perceptions about the venue*

What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself: i.e., what do people generally think about libraries? Are they places that are “cool” or “only for elites” etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The perception of users who have a solid educational background: The Warmasif is similar to an internet café, with cheaper prices. They understand that it is a place to access the Internet, and therefore they feel it is a “cool” place to hangout.

On the other hand, the perception of underprivileged people: The Warmasif is a place that has many computers with high technology that they don’t understand. They might be hesitant to come in due to the fact of their social status.

#### 4.2.3.13. *Social appropriation of information and generation of new knowledge*

What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

none

#### 4.2.3.14. *Trust, safety, and privacy*

What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?

In general, users have a good opinion about the safety, security, and privacy of the information and services offered in a Warmasif.

#### 4.2.3.15. *Gaps and opportunities in information and services offered*

What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)

none

#### 4.2.4. *Enabling environment*

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

As Warmasif is part of the Information and Communication System – i.e. are operating under Ministry of Information and Communication – they get support from Information and Communication Department (Indonesian Government). The Ministry of Information and Communication has the following agenda :

1. Improve information services.
2. Improve the infrastructure of information, post and communication.
3. Support delivery and distribution information for the public.
4. Improve the capacity of ICT human resources.

The establishment of Warmasif has some objectives as follows :

1. To decrease the digital divide in society (in accessing information, knowledge and communication).
2. To support the development of small medium business using e-commerce and therefore decreasing poverty in society.
3. To give information and knowledge in the field of education and health.
4. To achieve Universal Service Obligation in information and communication.

*4.2.4.1. Local and national economy*

Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment,

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

In general, the Internet user in Indonesia increases from year to year (i.e. 20 million users in year 2006, 25 million users in year 2007). The data is taken from Association of Indonesian Internet Service ([www.apjii.or.id](http://www.apjii.or.id)).

Recently, the local and national economy has been quite stable. The local and national economy directly affects public access to information and communication in the Warmasif. In addition, the price of Internet access is quite cheap in the Warmasif, therefore it is affordable for all society with low-medium-high income to access ICT.

*4.2.4.2. Legal and regulatory framework*

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The vision of the Indonesian President is to achieve an information and knowledge based society that is well aware of the purpose and usefulness of information. The vision is supported by many policies and laws, such as Freedom Public Information (*UU kebebasan Informasi Publik*) that

regulates the freedom of information for public. In addition, the President's Instruction no 3 year 2003 (*Instruksi presiden no 3 tahun 2003*) states the importance of ICT implementation to empower the citizen through the access of information.

#### *4.2.4.3. Political will and public support*

What is the level of political will and public support for this type of venue?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

As mentioned above, the vision of The President of Indonesia is creating a knowledge based information society. We believe that the vision influenced some public policy in providing public information access. Some private companies responded to the policy by donating and being involved in public access venues. For example in Warmasif Malang, a private company named PT. Nurama Indotama is involved as a partner to develop nircable network infrastructure in this Warmasif.

#### *4.2.4.4. Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

All Warmasif is organized by 3 parties as follows :

1. The Department of Information and Communication (Indonesian Government)
2. PT. Indonesian Post Office
3. Local Government at each city where Warmasif is established.

All Warmasif are connected in 1 network, they can communicate and share information via web site [www.warmasif.co.id](http://www.warmasif.co.id), which has 63 hyperlinks to all the locations in the country.

For each Warmasif :

1. The Local Government has the responsibility to announce/promote the Warmasif in its region, to support ICT training for small/medium business, to provide the content of website including e-commerce for small medium business, e-health information services, and e-library.
2. The local Post Office has the responsibility to provide room and facilities, to maintain hardware and software, telephone line, internet connection, and to update data. In other words, the post office has the responsibility to manage the Warmasif.
3. Department of Information and Communication provides basic equipments as follows: 3 personal computers, 1 unit server, 1 digital camera, 1 printer and 1 scanner.

#### *4.2.4.5. Partnerships*

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

It is open for all who want to be a partners with Warmasif. For example in Warmasif Malang, there is a private company (PT Nurama Indotama) which is involved as a partner to develop nircable network infrastructure in this Warmasif. Moreover, this partnership aims to improve the service quality in order to meet the satisfaction of the user.

#### 4.2.4.6. Other environment factors

Other factors in the environment that affect access and use of information in this kind of venue, not covered above?

None

#### 4.2.5. For publicly funded venues only: Revenue streams

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

##### 4.2.5.1. Budget

What is the total budget for this public access venue system (applies especially for libraries, answer for other venues if applicable and if available)?

Total Budget for Fiscal Year 2005-2008

Local currency name Rupiah amount (local currency) Rp 3.150.000.000

Approx. equivalent in USD 325.514 based on exchange rate of Rp 9677 per 1 USD on date August 21, 2008.

The budget was counted based on an interview with Warmasif staff at the Department of Information and Technology. Each Warmasif is awarded Rp 50.000.000 (5.166 USD), and the total number of Warmasifs is 63 venues from 2005-2008.

##### 4.2.5.2. Relative size of budget

How large (or small) is this budget in relation to other funding streams? (this is a way to show, in financial terms, how much the government cares about information and public access as compared to a variety of other issues in the country).

Relative Size of Budget for same year	Total budget (local currency)	Comments
<b>Total national budget<sup>2</sup></b>	Rp 647.670.000.000.000 (Rp. 647,67 Trilyun)	
<b>Education</b>	Rp 36.700.000.000.000 (Rp 36,7 triliun)	
<b>Warmasif)</b>	Rp 3.150.000.000	Rp 50.000.000 x 63 warmasif
<b>Public libraries<sup>1</sup></b>	Rp 139.432.470.081	

**Other Comments:**

#### 4.2.5.3. Sources of funding

What are the sources of funding for this public access venue system?

Sources of funding:	Approximate % of total budget	Comments
<b>Government sources:</b>	50%	Rp 50.000.000 (5.166 US\$) for each warmasif
<b>International donors:</b>		
<b>National donors:</b>		
<b>User fees/services:</b>	5%	
<b>Post Office</b>	30%	
<b>Local Government</b>	15%	
<b>Other (name)</b>		

#### Other Comments:

Each Warmasif is funded by the Department of Information and Communication (government sources), the local post office, and the local government. The operational cost is in the pay of the warmasif.

#### 4.2.5.4. Paths and flows of resources

How do resources get allocated and disbursed to the actual venues? For the principal funders, and especially for the public sources, what is the flow of funds? How are the funds raised (what tax stream), what path do the tax streams flow before they get to the specific venues? Who makes decisions about this funding?

#### 4.2.5.5. Fees and cost recovery

Describe if there are user fees or any other type of cost recovery. How does it affect service delivery and usage?

The user fees are quite cheap (Rp 3.000,- per hour is similar with 0,3 US\$ per hour). If the Warmasif has many users then these fees can cover operational cost. However, if the Warmasif has only a few users then the fees cannot cover operational cost. For example, there is 1 Warmasif in a non-urban area that closed down due to this problem.

#### 4.2.5.6. Cost categories

What are the main cost categories in the operation of this kind of venue? (% of total annual budget)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cost Categories for Operation:	Approximate % of total budget	Comments
<b>Staff (salaries, benefits)</b>	10%	
<b>Building infrastructure</b>	35%	
<b>Utilities</b>	10%	
<b>Staff Training</b>	5%	
<b>Computers/technology</b>	40%	
<b>Total</b>	100%	

#### 4.2.5.7. Recent changes and future trends

Describe any recent changes and anticipated future trends in the funding and revenue streams for this type of venue in the country. Have funding levels risen or decreased dramatically over the past few years? What is the outlook for the foreseeable future?

note : we don't have these data because these data are not open to public

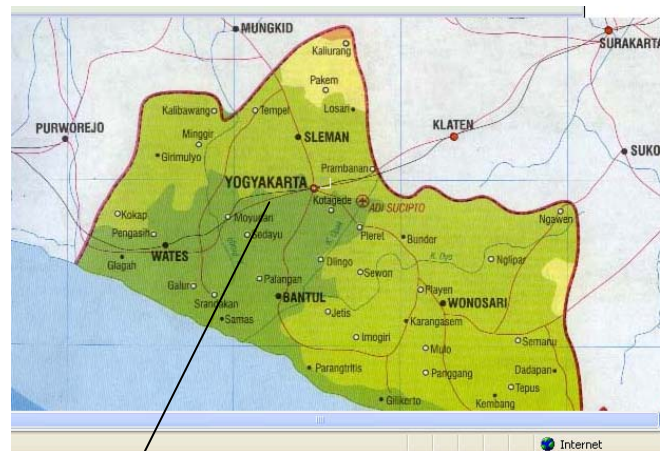
#### 4.2.6 Case example for venue 2: Warmasif Yogyakarta

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

Yogyakarta is urban area located in Java Island (1 of 5 big islands) – please see the map below. Yogyakarta is a province which has a population of 3,5 million people. This province consists of 5 regencies: Bantul, Sleman, Wates, Wonosari, and Kodya Yogyakarta.



Yogyakarta



Yogyakarta

The photo below shows Warmasif Yogyakarta. It opened on January 2008 and is located in the Yogyakarta Post Office. It is located near the city centre, thus it is easily accessible.





Warmasif Yogyakarta has 3 computers, 1 unit server, 1 digital camera, 1 printer and 1 scanner (these equipments were given by the Department of Information and Communication). In the future, the number of computers will be increased. It opens daily from 8 a.m. to 4 p.m.

The type of people who visit this location can be described as follows: Most users (90%) are between 15 to 35 years of age, 60% male, 69 % users have college or university education level.

Most of the users that visit Warmasif Yogyakarta access the Internet, but there are also few people who visit to rent the computer, print documents, or transfer digital data.

Among the various type of the Internet access, email is ranked at the top (60%), followed by web browsing (20%) and chatting (20%). Most of the information users seek is news (50%), followed by government services (20%), and education (10%).

Based on the site visit, the services of Warmasif in e-commerce still has not been used by people. The local government should give free training, especially for small medium business, in order to ensure that the public is able to use ICT to upload their products on the Warmasif website.

This picture below shows the Warmasif Web Site [www.warmasif.co.id](http://www.warmasif.co.id) and 3 main services in e-library, e-commerce, and e-health.

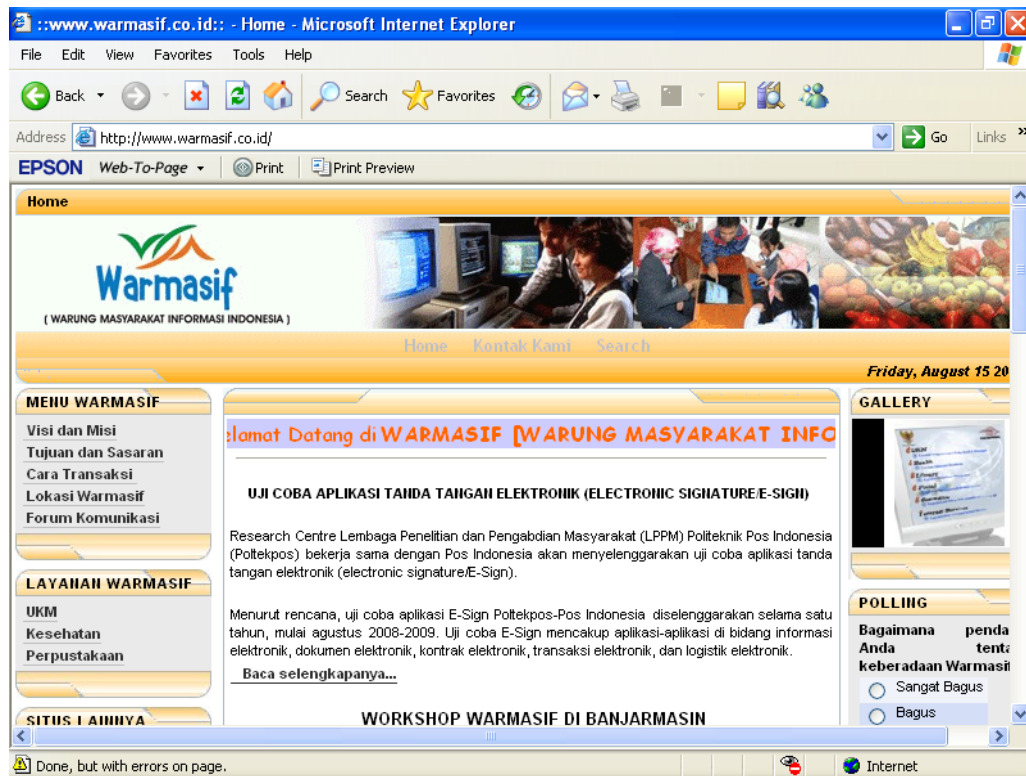


Figure 1. The Main Website of Warmasif [www.warmasif.co.id](http://www.warmasif.co.id)

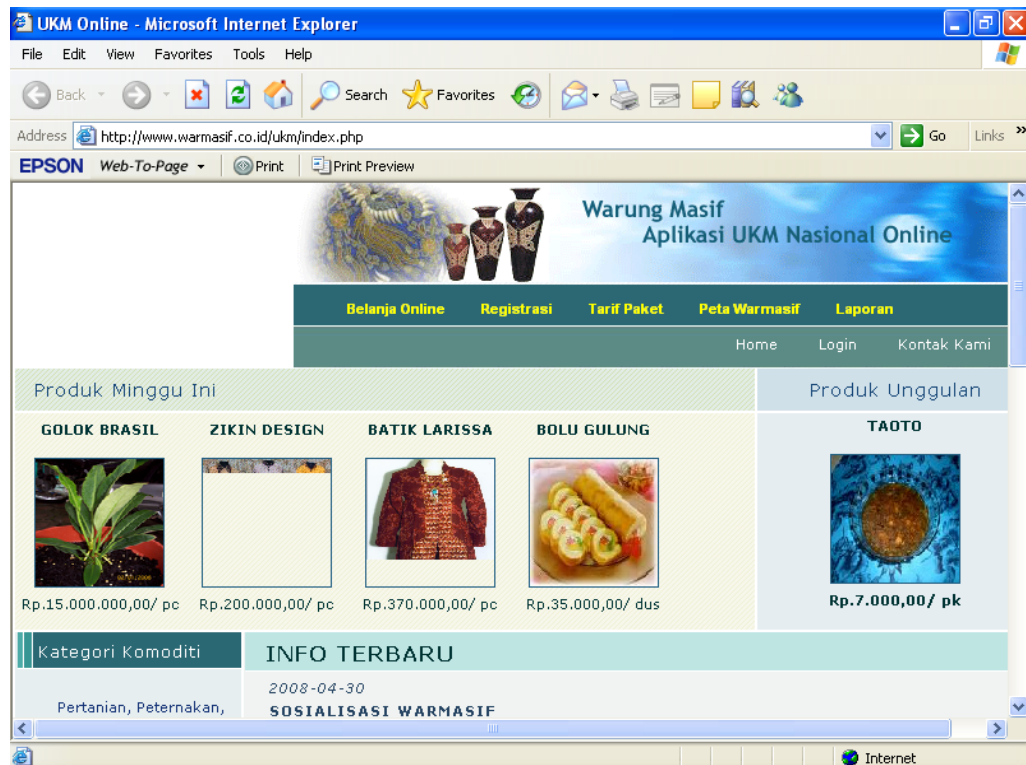


Figure 2. E-commerce services in the Website of Warmasif



Figure 3. e-health in the web site of warmasif.



Figure 4. e-library in the web site of warmasif.

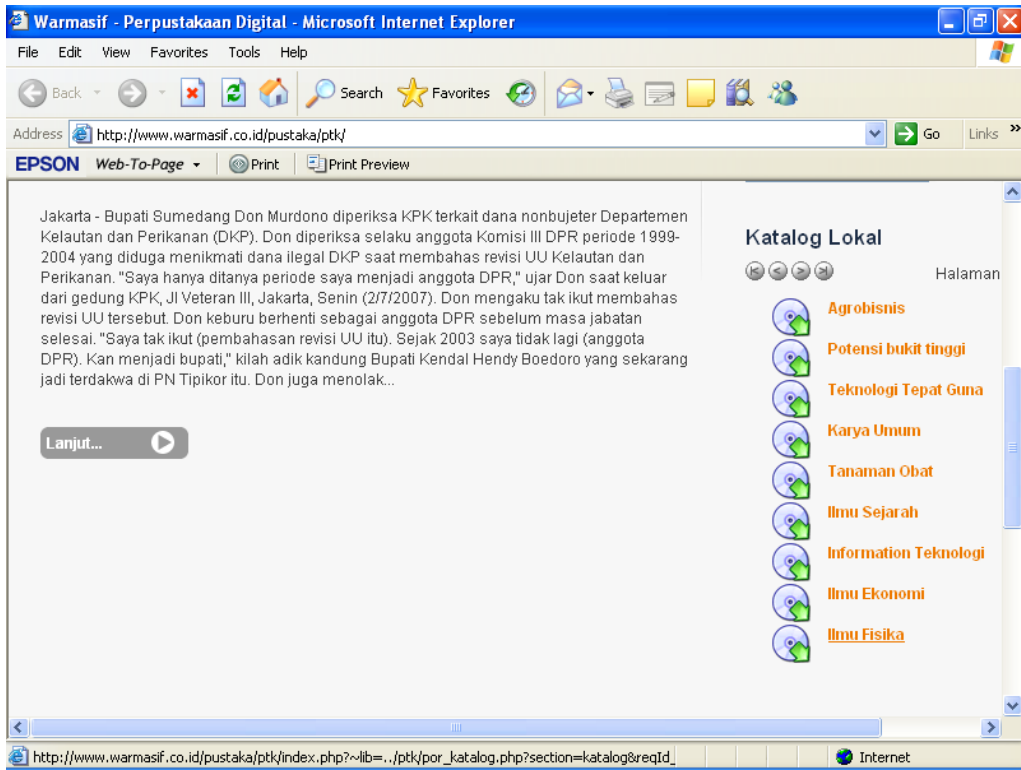


Figure 5. e-library in the web site of warmasif.

## 5.3 Venue 3: Technological Information Café (WARINTEK)

### 5.3.1 Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

Warintek is a technological information café developed in 2001 in Indonesia. The objective of the initiative is to empower units of documentation, information, and library. The effort has been formed by implementing many activities such as the enhancement of ICT, which facilitates people to access information, as well as the enhancement of human resources and the improvement of local information resources, which include access to capital.

The WARINTEK PROGRAM is an effort for empowering units of documentation, information, and library, which is funded by the Department of Research and Technology of the Government of Indonesia. The department has funded the program since 2001 until 2005. After the funding from Department of Research and Technology had ceased, many Warintek's have been funded by local government or by itself. Some local governments have integrated the Warintek program with local initiatives to develop a digital library. The Warintek program now involves many local public libraries in, higher education institutions, PDII-LIPI and NGOs. The effort has been formed by implementing many activities such as the enhancement of ICT, which facilitates people to access information, as well as the enhancement of human resources and the improvement of local information resources, which include access to capital.. This program's aim is to improve local economic development by providing technological information to very small and small enterprises.

Warintek provides much local information in Bahasa Indonesia that caters to underprivileged communities, which include small to medium enterprises and people in non-urban areas. Some of the information provided are basic data(database), output from surveys, specific information that include applied technology, image/picture, sketch from remote sensing, map etc, primary or secondary information literature that related to all aspect of science such as Biology, Chemistry, Physics, Environment. Economics, Social, Culture and all aspect of technology such as Biotechnology, engineering etc. All of the information is given in PDF format, which can be downloaded from [www.warintek.ristek.go.id](http://www.warintek.ristek.go.id) and also provided on cd-rom. Much of the information regarding local content is developed by a local government unit, such as local culture information, local product etc. The Sleman and Bantul local district have implemented the mobile Warintek with their mobile library, with the aim to reach remote areas by using cars or motorcycles as transport.

### 5.3.2 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

Most Warintek's are embedded within local public libraries and higher education libraries. Based on our site visit and interviews with Warintek operators, we have come to the conclusion that there are differences in infrastructure and equipment between each Warintek. The Bantul Warintek has been developing many local content and providing free hotspots in their facility. However, in contrast the Puspar UGM Warintek facility is quite limited. Differences in condition can also be found between UNNES Semaraing Warintek and Brawijaya Warintek, in which they both develop more scientifically based content for students.

Fee-wise, these Warintek's only charge an Internet usage fee, which is cheaper than an Internet café. Only the Bantul Warintek facility offers free-of-charge services.

#### 5.3.2.1 Physical access

Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The venues are distributed in every province of the country. There are 84 venues that are funded by the Department of Research and Technology from 2001 until 2005. There are 37 venues located in urban areas and 47 in non-urban areas.

Most of the venues are located within local public libraries or higher education libraries, documentation units and some NGO's that warrant public information access. A special room is provided for running a Warintek. As they are well distributed, these locations are easily accessible to the target group of people living in non-urban areas, students and researchers. The local government in Bantul and Sleman have developed mobile Warintek's to further improve their services to those living in remote areas.

#### 5.3.2.2 Appropriate technology and services

Describe how appropriate the technologies, services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Every venue provides local content in CD-Rom format or on their website, in which users can access local content via the main website – [www.warintek.ristek.go.id](http://www.warintek.ristek.go.id). However, several Warintek's have developed individual websites based on the needs of their specific target group. For example, Brawijaya Warintek has developed a website which intergrates with the Brawijaya University Digital Library. The website focuses on scientific journals and applied technologies

for supporting small and medium businesses, while the Bantul Warintek

– [www.warintek.bantulkab.go.id](http://www.warintek.bantulkab.go.id) – provides information on applied technology, food and health and coal briquette.

The Warinteks also provide ICT training, however the number of locations that do provide this service is limited. UNESA and Semarang Warinteks provide ICT training for small and medium enterprises.

Each Warintek is equipped with a room that consists of a PC for Internet access, CD-Rom and other equipment needed by users. Several Warintek's have been developing digital content in cooperation with local government initiatives or higher education initiatives. The Bantul district, which was devastated by an earthquake in May 2006, has been developing a digital library and also enhancing their digital information service to the public through mobile libraries and the mobile Warintek. The Bantul local government is pursuing the program more aggressively to provide public information access compared to other regions.

### *5.3.2.3 Affordability*

Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Generally, the service is very cheap and in some cases, free. The fee asked is only for Internet access. The price varies from Rp 1000,00 to Rp 2000,00 per hour, which is lower than the price at Internet cafes, while other services provided are free. The Bantul Warintek location is funded by the local government and is therefore free for the public for all their services.

### *5.3.2.4 Fees for services*

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

In case of Warintek Yogyakarta

Indicate amount in local currency Rp 1000,00

Equivalent in US Dollars: 0.1 US \$

Date of estimate August 2008

and local currency name Rupiah

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

### 5.3.2.5 Geographic distribution

What is the distribution of the venues in terms of their geographic location?

Complement any details not already included in section 2.1: Venue Selection.

As explained above, the venues are distributed in every province of the country. 37 venues are located in urban areas and 47 venues are located in non-urban areas. The table in the additional pages show warintek distribution within the provinces.

#### 5.3.2.5.1 Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Description of map:

The map shows Indonesia and the Warinteks distributed across the provinces. In the table, there are only 28 provinces because 5 new provinces have been created since 2005.



### 5.3.2.6 Other factors affecting access

Other factors that affect equitable access to public information in this type of venue, not covered above?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

## 5.3.3 Capacity and relevance

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Warintek are venues that are located in local government's public libraries, higher education public libraries, government's unit of documentation and NGOs that offer public information access. Therefore, each institution that has been awarded a Warintek program must provide personnel for maintaining and managing the venues. Each personnel are trained by Department of Research and Technology., however the standardization of personnel's skill is not the same in each venue. Personnel who work at higher education Warinteks are more competent than personnel that worked at other locations. For example, personnel from Warintek UNESA offer more services than personnel that work at Warintek's in local government public libraries. They offer ICT training for developing a website for small medium enterprises.

Being funded by the local government and higher education institutions, some of Warintek have developed local relevant content. As an example, Warintek Bantul develops local content that is related to their population's need. Most of Bantul residents work at small and very small medium enterprises. They need information related to their business, such as how to develop small bird cultivation, how to use coal briquette etc. Which need? Another example is Warintek Sleman. In the 2009, they developed local content related to their culture and applied technology for small enterprises. All of the content is available on their Warintek local website. Warintek Brawijaya also develops their local content related to their users. Warintek Brawijaya focuses on scientific information content needed by Brawijaya University's Students. However, some Warintek managers that it is difficult to collect local content because only limited venues develop their own unique local content.

Most Warintek's provide information downloadable through their website due to the increasing number of Internet users as well as households that are connected to the Internet. In addition, the Indonesian government has said that they will provide Internet connections to all villages in the country by 2009. In the future, we are confident that there will be a larger number of Internet users in the country.

### 5.3.3.1 Staff size

How many people work in a typical facility for this type of venue? (full time-equivalent employees or contractors; describe any significant variations, i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The amount of staff depends on the services provided in each venue. Locations that only provide Internet access are equipped with one to two staff, while venues that offer more services, such as mobile Warintek's, local content and ICT training have more staff. Most of the staff in local government public libraries and education institutions are permanent.

### 5.3.3.2 Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use public access to information and communication services offered in this venue? Differentiate by applicable Equity of Service variables (Form 1c).

(v) If appropriate, indicate any specifics that apply to Digital ICT services alone.

(vi) For Public Libraries, indicate if Library School training is available and/or required for librarians.

In beginning of the program, most staff are trained by the department of research and technology to maintain and operate Warinteks. . However, several staff are also trained in ICT skills by the local government and institutions to enhance their knowledge. Most Warintek staff in local government public libraries have limited skill to help users access and use ICT. The staff in Warintek Semarang, however, are more competent in ICT and also offer ICT training for those interested.

### 5.3.3.3 Services offered

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

*Services Offered*

*Comments*

16. information in CD-ROM

Most of Warinteks offer local content that is needed by their users. The information is developed by PDII LIPI.

17. ICT training

Warintek UNES Semarang offers ICT training for small and medium enterprises.

18. Web developement

Warintek UNES Semarang offers web development for small enterprises.

19. Mobile warintek

Warintek Bantul and Sleman provide mobile Warintek for reaching remote areas.

20. internet access

All Warinteks offer Internet access.

21. Computer

All Warinteks offer PC rental.

22. website

[www.warintek.ristek.go.id](http://www.warintek.ristek.go.id) is the national website of Warintek

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

Listed below are the salient services provided by a Warintek:

Warintek UNNES Semarang offers ICT training centres that are approved by the National Standard of telematics professions.

1. Warintek Brawijaya , located in Brawijaya University, provides scientific information, including e-journals and applied technology documentation.
2. Warintek Bantul, embedded with the local public library, provides free Internet access and hotspots in their area , as well as mobile Internet access. They also develop local content that relate to small enterprises in the area. All of the information about local content can be downloaded from their website
3. Warintek Sleman and Warintek Bantul offer mobile Warintek for reaching remote areas.

#### *5.3.3.4 Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Most of Warinteks are located in non-urban areas with the objective of providing easy access to information to the non-urban populace as well as small enterprises, especially in the field of applied technology and also information that is relevant to the daily activities of the residents. However, Warintek managers have run into difficulties in explaining applied technology content. Based on an interview with Warintek staff at KPDE Bantul, several users often ask staff about applied technology; however, as the staff are only trained to operate Warintek equipment, users often have no help in the area. A solution to this problem would be to develop an interactive website to facilitate interaction between users and applied technology experts.

#### *5.3.3.5 Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### **Available Content:**

Most of the content can be downloaded from [www.warintek.ristek.go.id](http://www.warintek.ristek.go.id). The content is

developed by the department of research and technology and PDII LIPI. However, several locations upload their own content into their local websites, such as

[www.warintek.bantulkab.go.id](http://www.warintek.bantulkab.go.id) and [www.warintek.slemankab.go.id](http://www.warintek.slemankab.go.id).

**Other Content Needed:**

There is a need to provide updated applied technology content that is relevant to the population's need. Based on an interview, there are still many lingering questions on how to implement applied technology. Thus, there is a lack of information provided.

**Local Initiatives to build needed content:**

Most Warintek's provide information on applied technology, health and sanitation, traditional menus and energies, which are provided by the Department of Research and Technology and PDII LIPI. There is also an initiative from Bantul and Sleman to build local content based on local culture and applied technology. While Warinteks within higher education institutions provide more information regarding science and technology, such as Warintek Brawijaya and UNNES.

*Source: [www.warintek.ristek.go.id](http://www.warintek.ristek.go.id), interviews with warintek staff of Bantul and Sleman.*

*5.3.3.6 Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

All of the content is available in Bahasa Indonesia. There is no content in local languages.

*5.3.3.7 Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(iii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Refer to section 3.4 Charts: Information Needs and complement here as needed.

Warintek's are mostly for technological information access purposes. Users can access information in various ways, such as using the CD-Rom provided or downloading information from the website. The top-ranked usage in these locations are mostly web-browsing and email.

*5.3.3.8 Number, type, and frequency of users*

Refer to section 3.4 Charts: Information Needs. Complement here as needed.

Most users visit Warinteks occasionally. The locations need to improve their quality of equipment as well as enhance their services. Based on interviews, several locations have limited bandwidth, outdated PCs and limited local content. We expect the national or local government to fund the enhancements needed.

### *5.3.3.9 Users capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Most information provided are available on Warintek websites or on CD-Rom. Users can access the website and download information when needed. However, to access information through CD-Rom, users have to visit the location personally to retrieve information.

In urban areas, most users are familiar with ICT. Based on interviews, underprivileged communities are the target group for ICT training, as there is a lack of knowledge in these remote areas.

### *5.3.3.10 Training Courses for Users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

Based on our research, Warintek UNNES Semarang is the only facility that offers certified training. They also offer free ICT training to high school students. Other courses offered are Modern Secretary, Digital Publishing and Digital Advertising, and Computer Technician.

Other locations on the other hand offer no specific ICT training, however staff will provide help to users on the use of ICT.

### *5.3.3.11 Integration into daily routines*

How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The aim of the locations is to contribute to economic growth by providing technological and scientific information needed by small and very small enterprises. In urban and non-urban areas, most of users' educational background is college/university. They search for technological information and scientific information that are relevant to their daily needs, such as how to use a coal briquette and how to process food.

The information is available to download in PDF format through the website.

#### *5.3.3.12 Users perceptions about the venue*

What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself: i.e., what do people generally think about libraries? Are they places that are “cool” or “only for elites” etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Based on interviews with users, the venues are regarded as “cool” or “elite” due to the educational background of users; however, the aim of the centre is the opposite. The image of science and technology has become associated with the “elite” and most have the understanding that the venues only provide scientific information.

#### *5.3.3.13 Social appropriation of information and generation of new knowledge*

What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Warintek managers have to start communicating with other venues to share local content and therefore develop each Warintek. For example, Warintek UNNES shares contact with Warintek Brawijaya to share local content.

#### *5.3.3.14 Trust, safety, and privacy*

What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?

Generally, the general populace thinks highly of these venues, with several locations such as Warintek Brawijaya, Bantul and UNNES offering good services. However, we do not have enough information on the privacy of users in these locations.

#### *5.3.3.15 Gaps and opportunities in information and services offered*

What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)

Based on our interview, some Warinteks need to upgrade personnel skill and their infrastructure. Warintek Yogyakarta has limited infrastructure, PC and an access room. We believe that there is an essential need to upgrade the personnel and ICT infrastructure in some venues.

### 5.3.4 Enabling environment

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

In general, Warinteks that are attached to higher education public libraries are influenced by the increase of investments in the Indonesian educational system. The Department of national education has aggressively funded the development of a digital library. However, these locations do not offer significant services., however they are focusing on how to upgrade Internet access to reach remote areas. They also plan to develop local content but less aggressively than Warinteks in higher education institutions.

#### 5.3.4.1 Local and national economy

Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The strategy of Warinteks is to provide technological information through their web site. The strategy is relevant to the increase of internet users in Indonesia. Based on APJII survey data, the number of internet users reached 25 million in 2007. Based on BPS(bureau of statistical centre) data, there are an increasing number of households that access the Internet. In general, we think that the increasing number of internet users and households that access the Internet is influenced by the growth of national economic as explained in the country assessment.

#### 5.3.4.2 Legal and regulatory framework

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

We think that main legal framework influencing public access to information is the Indonesia Constitution. Based on the constitution, the main duty of the state is educating the citizen. Based on the duty as explained above, the department of Research and Development has developed to disseminate their research output to the citizen and developed research information networking through the Warintek program. In the case of the local government of Yogyakarta, there are initiatives to provide a digital library network that helps people have easier access to information. However, the initiative has not been executed optimally; however, we believe that the local initiative will influence the venue in the future.

#### 5.3.4.3 Political will and public support

What is the level of political will and public support for this type of venue? (refer to and complement section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The information technology vision of the President of Indonesia is to attain a knowledgeable and information based society. The vision has influenced some public policies in providing public information access. Many private companies and individuals have responded to the policy by donating and being involved in the initiative.

#### *5.3.4.4 Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

There have been many types of venues organized and embedded with the local public library as part of the national public library system, while the venues attached to higher education institutions are organised as part of the national education system – with the main organizing done by the Department of Research and Technology.

#### *5.3.4.5 Partnerships*

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Based on interviews, Warintek UNNES is the best example in the development of a public-private partnership between many local small enterprises and the local government. While other locations only have limited partnerships.

#### *5.3.4.6 Other environment factors*

Other factors in the environment that affect access and use of information in this kind of venue, not covered above?

None

### **5.3.5 For publicly funded venues only: Revenue streams**

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

#### *5.3.5.1 Budget*

What is the total budget for this public access venue system (applies especially for libraries, answer for other venues if applicable and if available)? ??? Any data info?

Total Budget for Fiscal Year 2001-2005

Local currency name Rupiah amount (local currency) Rp 1,660,000,000.00



Approx. equivalent in USD 171.540 based on exchange rate of Rp 9677,00 per USD on date 21 August 2008.

The budget is estimated on the with Warintek staff at Department of Research and Technology. Each Warintek is awarded Rp 20.000.000,00 in funds.

*5.3.5.2 Relative size of budget*

How large (or small) is this budget in relation to other funding streams? (this is a way to show, in financial terms, how much the government cares about information and public access as compared to a variety of other issues in the country).

Relative Size of Budget for same year	Total budget (local currency)	Comments
<b>Total national budget<sup>2</sup></b>	Rp. 647,67 Trilyun/ Rp 647.670.000.000.000,00	
<b>Education</b>	Rp 36,7 triliun/Rp 36.700.000.000.000,00	
<b>Warintek</b>	Rp 1,660,000,000.00	based on the estimation on the Warintek program since 2001-2005.
<b>Public libraries<sup>1</sup></b>	Rp 139.432.470.081,00	

*5.3.5.3 Sources of funding*

What are the sources of funding for this public access venue system?

Sources of funding:	Approximate % of total budget	Comments
<b>Government sources:</b>	99 %	
<b>International donors:</b>		
<b>National donors:</b>		
<b>User fees/services:</b>	1%	Case in warintek Yogyakarta
<b>Other (name)</b>		
<b>Other (name)</b>		
<b>Other (name)</b>		

**Other Comments:**

Most Warinteks budget is funded by the local government or higher education.

*5.3.5.4 Paths and flows of resources*

How do resources get allocated and disbursed to the actual venues? For the principal funders, and especially for the public sources, what is the flow of funds? How are the funds raised (what tax stream), what path do the tax streams flow before they get to the specific venues? Who makes decisions about this funding?

The paths and flows of resources are as follows:

1. The department of research and technology have funded the venues since 2001 to 2005. The funds are focused on PC equipment, Internet access, and local content.

2. Local Public library, NGO or higher education provide room for the venues.
3. After 2005, all of the venues funded by on its own. If the venues were embedded in local public libraries, local government have funded the venues. If the venues are embedded in higher education institutions, the institution have funded the venues.

#### 5.3.5.5 Fees and cost recovery

Describe if there are user fees or any other type of cost recovery. How does it affect service delivery and usage?

In general, user fees are only applicable for Internet access. The user fee is cheaper than cyber café's Internet access fee.

Only Warintek Bantul offers free services.

#### 5.3.5.6 Cost categories

What are the main cost categories in the operation of this kind of venue? (% of total annual budget)

If appropriate, indicate any specifics that apply to Digital ICT services alone. ??? Any data info?

Cost Categories for Operation:	Approximate % of total budget	Comments
Staff (salaries, benefits)	16 %	
Building infrastructure	32 %	
Utilities	5 %	
Staff Training		
Computers/technology	47 %	
other (name)		
other (name)		
other (name)		
other (name)		
other (name)		
other (name)		
other (name)		
<b>Total</b>	100%	

#### Other Comments:

We estimated the budget based on Warintek Bantul, which provided 10 computers for Internet usage.

#### 5.3.5.7 Recent changes and future trends

Describe any recent changes and anticipated future trends in the funding and revenue streams for this type of venue in the country. Have funding levels risen or decreased dramatically over the past few years? What is the outlook for the foreseeable future?

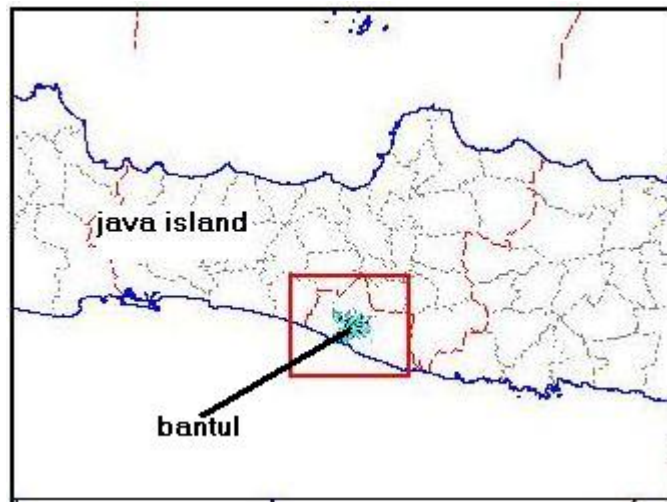
Recent changes have increased the number of investments in Internet access infrastructure and local content using budget from local government and higher education.

### 5.3.6 Case example for venue 3: Warintek Bantul

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

Insert Case Example and Photo here.

The district of Bantul is located in Yogyakarta Province. It was devastated by an earthquake on 27 May 2006. However, Bantul has run its recovery program successfully. See the map below.



The local government awarded the Warintek program in 2004. They provide Internet access and local content to the general public. The venue is attached to a local public library. They also plan to develop their own local content that is downloadable via their website. A mobile Warintek is also attached to the mobile library. The picture shows a mobile library and mobile Warintek on their local website.



Several young people queuing in front of the office in Warintek Bantul.



WARINTEK - BANTUL :: - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://warintek.bantulkab.go.id/web.php?mod=basidata&kat=1&sub=2>

WARUNG INFORMASI DAN TEKNOLOGI  
**WARINTEK BANTUL**

| User Online : 10 | Kamis, 21 Agustus 2008 |

» Teknologi Tepat Guna > Budidaya Pertanian

### Budidaya Pertanian

**DINAS PERTANIAN DAN KEHUTANAN KABUPATEN BANTUL :**

1. PEMBENIHAN BAWANG MERAH Varietas TIRON BANTUL
2. PROSPEK AGRIBISNIS BAWANG MERAH KABUPATEN BANTUL
3. CABE MERAH KABUPATEN BANTUL
4. BUDIDAYA TANAMAN TEMBAKAU VIRGINIA
5. BUDIDAYA JAGUNG
6. BUDIDAYA PADI
7. BUDIDAYA KACANG TANAH
8. PROGRAM PMI DAN PAT
9. PENGENDALIAN PENYAKIT VIRUS BELANG PADA TANAMAN KACANG TANAH
10. PENGENDALIAN PENGGEREK TONGKOL PADA TANAMAN JAGUNG
11. PENGENDALIAN LALAT KACANG PADA TANAMAN KEDELAI

**Sistem Informasi Manajemen Pembangunan di Perdesaan Proyek PEMD, BAPPENAS :**

**TANAMAN BUAH-BUAHAN :**

1. DURIAN
2. JERUK

start | 3 Mi... | 6 Int... | 8 Mi... | Linguist | 2 Mi... | Untitle... | Google | Done | Internet | 2:12 PM

## 6 Success Factors and Strategic Recommendations

### 6.1 Summary of Lessons in Country

#### 6.1.1 Information needs

What are the most critical information needs by underserved communities that are currently not being adequately met by public access to information and communication venues?

The research found that people in Indonesia are aware to the usefulness of information for helping their efforts to improve their quality of life. Based on our observation, the kinds of information needed by people are different. The most significant information that is needed by people in Urban and non-urban area is educational information, followed by news. In non-urban area, the kind of information sought is often entertainment. However, though most of inhabitants in non-urban area are farmers, people who seek agricultural information are less than 11 %. We found that people in urban areas use Warintek to seek agricultural information.

Based on our interviews with expert(s), primarily two groups have been identified as active users of information access venues. The first group include small and medium enterprises. Most in this group are in need of applied technology and economical information, such as prices of tools and commodities that are relevant to their business, statistics, etc. The second group involves educated people. Most in this group are in need of scientific and technological information, such as journals and educational information.

#### 6.1.2 Where people go

Where do people go for public access to information and communication in the country, especially underserved communities?

Most educated persons go to higher education libraries to access journals. However, in some cases, the libraries are restricted to the general public, only students may be allowed to enter. In higher education public libraries, the efforts in providing ICT based information access are supported and funded by the Department of National Education. Most locations that offer public access to information lack a sufficient ICT infrastructure, leading people to head for Internet cafes, which offer a more suitable environment to access the Internet.

#### 6.1.3 How access, capacity, and environment affects public access

How do access, capacity and environment affect public access to information and communication venues in the country? (Refer to details under access, capacity and environment in research design document).

There are various issues related to access, capacity and incentives for the public to use information venues. If we take a closer look at villages in Yogyakarta, one can see a concentration of production of handicrafts for exporting, and most of these villages are located in non-urban areas. Unfortunately, there are not many information venues that are close to the villages. There are no ICT training centers to aid the people in learning ICT skills and how to use them for their trading. However, despite the odds, there are some who travel into urban areas seeking information, and ways of communications with customers. Obviously, there is a growing need for such people to be able to access information efficiently and conveniently.

Sometimes the public access information venues do not offer relevant content in parallel with the needs of local users. For example, in Yogyakarta area, the users need content and skills to use applied technology which is relevant to their businesses; however, so far there are no venues that provide this service.

#### 6.1.4 Role of ICT

What is the role of ICT in public access to information and communication? What untapped opportunities exist?

The main role of ICTs in venues is probably to make access to information more effective and efficient. People may access information any time and any where and ICT, especially multimedia technologies make information more understandable.

In general, Indonesian venues seem to have limited offerings of relevant content to local need. Local governments working with information access venues can be more active in providing local content due to their knowledge of locals' needs.

### 6.2 Success Factors and Recommendations

#### 6.2.1 Where to invest resources

How could additional resources (money, people, time, knowledge) be best used to strengthen public access to information and communication venues and practices in the country? (i.e., solutions that would make it more accessible, affordable, appropriate?)

Based on our observation in public libraries, Warintek and Warmasif, public libraries seems to be more appropriate and more efficient in providing opportunities for public access to information. Forexample, the decision of the local governments of Bantul and Sleman to integrate their local public libraries with Warintek venues seems to be an appropriate action. Public libraries have relatively more resources and services, such as strategic locations, a building and human resources. They may be given more resources for enhancing the ICT capacity of public libraries, especially, in non-urban areas. The local governments may consider provisions of ICT training centres that are free for the public, especially targeting the underprivileged community as in the example of the local government of Bantul which has developed an ICT training center free for the public. The training centre is supported by a International donor, Intel Corp, for providing the resources. There are there fore opportunities for making the ICT training centers to be widespread and running optimally.

Note: This ICT training centre was devastated by an earthquake in 2006. Now the local government has been reconstructing the training centre.

Also, the government organizations must promote and improve the image of public information venues. Most people think that these venues are not good enough and are lacking modern technology. Efforts from the local government of Yogyakarta to provide and promote a great service in Plaza Informasi seems to be trend to follow. Also important is awareness building regarding the services in the venues as most people still think ICT is not for them but is for educated and wealthy. This image has to change in order to make those who need to use these venues accept and adopt them.

### 6.2.2 Key success factors

What are the key success factors for public access to information and communication to meet information needs of the population, especially underserved communities, and especially through digital ICT?

Some of the key success factors for public access to information and communication venues in Indonesia can be summarized as follows:

1. Access/locations: the venues must be located in areas that are closer to the targeted people. For example: warintek UNNES , a venue that is located in State University of Semarang, is a venue that serve students and small/medium enterprises. It serves as ICT training centre, internet access center and digital library. Its location is around their customer or targeted people. Another venue solving the problem of the location is Bantul Public Library. The venues are equipped with mobile library for reaching out remote areas. The mobile library visits remote areas daily.
2. Relevant content: the venues must provide content that is needed by people of under served communities. The warintek Brawijaya located in University of Brawijaya Malang, provides scientific and applied technological content that is needed by students. There is a relative success in making students to visit venue because they can use relevant information and content to their needs.
3. ICT training centre that is free for all: For example, Warintek UNNES offer free ICT training for high school students and small enterprises. Free ICT training will encourage the use of ICT by underserved people significantly. Local government of Bantul provide free ICT training centre that is supported by a multinational company- providing a place, ICT equipments and an instructor.
4. ICT skilled staff for helping users if they face difficulties in using the systems and software. Warintek Bantul offer free access and provide a qualified member of staff for helping users if there is a query in using hardware and software (but this is not case for many other Warinteks).



### 6.2.3 Role of ICT

How can public access to information and communication venues in the country be strengthened to offer more meaningful and equitable access to information, especially using digital ICT?

Based on data on Internet users in Indonesia, there seems to be an increasing number of Internet users in recent years. Villages connected to the Internet increase every each year. The government should focus on developing content that is available anytime and accessed from any where. The use of a websites and locally relevant content for providing information is very strategic.

### 6.2.4 Top ten recommendations

What are the Top Ten recommendations for public access to information and communication venues in your country? Make sure you include policy recommendations as part of them.

Based on research observations, the government must be more active and purposeful to improve the quality of the public access to information. In general, it has to lead creation and enhancement of the quality of local content, and ICT infrastructure including bandwidth, telecommunication infrastructure and ICT equipments such as PCs, printers and furnitures in the venues. The recommendations below are classified according to efforts to improve each type of the venues.

1. PUBLIC LIBRARY. Indonesia has many public libraries, which are widespread throughout the country. However, there are only few public libraries that have ICT (around 1%). In future, the number of libraries with ICT services offered should be increased in order to give better information services and these services should target the undeserved communities.
2. PUBLIC LIBRARY: There are very limited local content in public libraries. We think the local governments can take a responsibility to develop local content needed by the local and underprivileged community.
3. PUBLIC LIBRARY: Most public libraries are not completely suitable and conveneint places for learning. Thus, improving the learning environment is pivotal.
4. WARMASIF. Many underprivileged people still do not know about Warmasif because the venues are quite new (established in 2005 to 2008). For this reason, the Indonesian Government and PT. Indonesian Post Office should promote the Warmasif to the public through advertisement in newspapers, television, or radio.
5. WARMASIF. Some underprivileged people often think that computers are expensive and generally are used by people with medium or high social status. Local Government should provide free training of ICT for underprivileged people, so they know the benefits of ICT and can use them.
6. WARMASIF. The services of Warmasif (e-commerce, e-library, e-health) have still

not shown its full effect on users. The local governments should have an initiative to invite users to utilize these services. For example, extend an invitation of free training for small to medium businesses to enable them to upload their products to the Warmasif website.

7. WARINTEK: Some Warinteks are not fully operational. The main problem is that they do not have enough funds to continue operations. Thus, the government should be aware of lack of funds and provide a solution, such as, perhaps, integrating Warintek into public libraries.
8. WARINTEK: There are limited local content in Warinteks. However, there has been some development of content by the local governments and higher education institutions. The government should provide more local content related to the need of small enterprises and other users in the area.
9. WARINTEK: Increase the bandwidth and PC quality. Most Warinteks do not have sufficient bandwidth for Internet access.
10. WARINTEK: Some locations do not provide comfortable rooms. For example, Warinteks only provide 4 square meter sized access rooms which are very small.

## 7 Appendices

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Please attach on the next pages any other relevant information, resources or materials that can help understand public access information venues in the country.

### 7.1 List of Countries Included in the Research

Algeria
Argentina
Bangladesh
Brazil
Colombia
Costa Rica
Dominican Republic
Ecuador
Egypt
Georgia
Honduras
Indonesia
Kazakhstan
Kyrgyzstan
Malaysia
Moldova
Mongolia
Namibia
Nepal
Peru
Philippines
South Africa
Sri Lanka
Turkey
Uganda

## 7.2 Overview of Research Design

The Center for Information & Society (CIS), in partnership with the Information School of the University of Washington, has as part of its core mission the investigation of how inequities in our global society can be reduced through improved access to information and communication technologies (ICT). As part of its research activities, CIS has brought together interdisciplinary teams of researchers to examine the needs, readiness and success factors for public access to information and communication venues through digital ICTs in 24 countries around the world.

### *Project Goal:*

- Understand information needs, and opportunities to strengthen institutions that offer public access to information and communication, especially to underserved communities, and especially through the use of digital ICT: What are the needs, barriers, opportunities and success factors for public access to information and communication to help human development in countries around the world? For the purpose of this study, research is primarily focused on Libraries and Other institutional venues for which access to information has a significant role. This research includes understanding venues where digital ICT is currently offered, *and* also where ICT is not currently offered but there is potential and strong institutional support to include ICT (for example, some public libraries where digital ICT services are currently not offered, but there would be strong interest in offering them).

**Libraries** include public libraries and other types of libraries that are open to the public. **Other venues** include national initiatives that offer public access to information, either with ICTs (telecentres, cybercafés and the like) or without ICTs (post offices, community centers and similar) and are of significant importance in local contexts.

### *Project Purpose:*

- Inform policy and funding decisions: Inform funders and government decision makers about future program direction and funding allocations
- Contribute to public knowledge: Disseminate results of in-depth country and comparative analyses, including research design and analytical models

To inform project design, CIS adapted the Real Access framework (Bridges.org), analyzing public access to information and communication through a total of 14 research categories grouped under the dimensions of **Access, Capacity & Relevance** and **Enabling Environments**. Adaptation was done in consultation with research partners around the world for the purposes of this study.

The implementation of this project is organized as a two-phase process:

### *Phase 1: Nov 07 – Feb 15, 2008*

During Phase 1, a **Draft Country Report** will be prepared by local research teams in each country. The Draft Country Report includes a Country Profile, a Country Assessment and an early draft of Lessons & Recommendations.

The *Country Profile* is a collection of 50 general descriptive data points drawn from readily accessible sources; CIS pre-populates the reports for each country, and offers them for validation and comments by local teams. Country Profiles provide primarily statistical data that is intended to offer a quick snapshot of each country, including geography, political environment, demographics, economy, education and ICT infrastructure.

Using a common approach to define research processes, local teams will conduct initial fieldwork to inform a *Country Assessment*. The Country Assessment includes both a scan of information needs, especially for underserved communities; and an assessment of public access to information and communication venues (with or without digital ICT services) and their environment, resulting in a better understanding of gaps, opportunities, and readiness of public access to information initiatives in each country.

During Phase 1, each country team will also complete an early draft of *Success Factors and Recommendations* focused on strengthening public access to information in the country, and identify potential themes and issues for further study in Phase 2.

### **Phase 1b: Feb 15-Mar 15, 2008**

During this period, CIS will conduct a preliminary comparative analysis based on the Draft Country Reports from all participating countries, and suggest feedback and guidance for Phase 2 of the study. The comparative analysis will look for

salient trends, emergent themes, patterns, and threads across regions. During this period, next steps will be determined for in-depth country research for Phase 2.

### *Phase 2: March 2008 – August 15, 2008*

Phase 2 will involve a deeper assessment of public access to information and ICTs across all 24 countries. In particular, CIS is interested in deeper probing of the emerging themes and scenarios identified in Phase 1. A **Final Country Report** will include high level analysis, success factors and recommendations to strengthen public access to information and ICTs in each country. Final comparative analysis across countries, with analytical models and scenarios, will be completed by CIS after receiving the Final Country Reports.

Findings will be disseminated publically through reports, academic publications, conferences and consortiums. Each country team is expected to produce at least one publishable paper on their research and findings, plus additional papers emerging out of the comparative analysis and global findings. Publications will be part of the public domain, with the CIS web site, partners' sites, and other publication channels to be identified.

### 7.3 Annotated Country Profile (Form 2)

Attach here an updated copy of the annotated Country Profile (Form 2).

## 7.4 Other Appendices

Attach other appendices here, as needed.

**4.6a)** Identify around ten of the most valuable contacts who are knowledgeable about the public access to information & communication environment, especially to underserved communities, in the country. (Include name, title, and contact information for each; indicate their particular area/s of expertise, such as type of venue, sub-population or public office role, among others.

4. Prof. Dr. M. Nuh: Minister of Communication and Informatics
5. Dr. Suhono Harso Supangkat: expert Departments of Communications and Informatics
6. Drs. Freddy H. Tulung MUA , Directorate of information dissemination and public facility Department of communications and Informatics.
7. Joko Agung: Director of E-government Departments of communications and Informatics
8. Dr. Achmad Djunaedi: Head of Regional Information Board Local Government of Yogyakarta
9. Suparwoto: Head of Public Information Board Departments of Communications and Informatics
10. J. Surat Djumadal, Head of Information Technology Services Unit Local Government of Yogyakarta Province.
11. Ig. Sumasriyono, Head of Data Electronic Processing of Bantul Local Government.
12. Ir Kemal Prihatman, M.Sc: Deputy of The IT adoption Department of Research and Technology.

## Supplemental statistics

<b>TABLE Ap1. Percentage of Population by Area, Province and District, 2000</b>		
<b>Province</b>	<b>Urban</b>	<b>Rural</b>
Nanggroe Aceh Darussalam	28.75	71.25
Sumatera Utara	42.64	57.36
Sumatera Barat	28.93	71.07
Riau	34.59	65.41
Jambi	28.32	71.68
Sumatera Selatan	33.78	66.22
Bengkulu	28.33	71.67
Lampung	21.24	78.76
Kep. Bangka Belitung	43.04	56.96
Kepulauan Riau	76.01	23.99
DKI Jakarta	100	na
Jawa Barat	50.31	49.69
Jawa Tengah	40.19	59.81
DI Yogyakarta	57.64	42.36
Jawa Timur	40.88	59.12
Banten	52.17	47.83
Bali	49.74	50.26
Nusa Tenggara Barat	35.08	64.92
Nusa Tenggara Timur	15.46	84.54
Kalimantan Barat	26.4	73.6
Kalimantan Tengah	28.14	71.86
Kalimantan Selatan	36.21	63.79
Kalimantan Timur	57.75	42.25
Sulawesi Utara	36.66	63.34
Sulawesi Tengah	19.82	80.18
Sulawesi Selatan	31.07	68.93
Sulawesi Tenggara	21.01	78.99
Gorontalo	25.54	74.46
Sulawesi Barat	17.97	82.03
Maluku	25.33	74.67
Maluku Utara	29.31	70.69
Irian Jaya Barat	33.13	66.87
Papua	21.14	78.86

Source: [http://www.datastatistik-indonesia.com/component/option,com\\_tabel/task,/Itemid,164/](http://www.datastatistik-indonesia.com/component/option,com_tabel/task,/Itemid,164/) accessed 21 August 2008

**Table Ap 2. Percentage of Villages Having Communication Facility by Province**

Prasarana Komunikasi/ Communication Facility	Sumatera	Jawa	Bali + Nusa Tenggara	Kalimantan	Sulawesi	Maluku + Papua	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Telepon Umum Koin/ Coin Public Telephone</i>							
2000	1,54	13,23	6,58	1,30	3,59	1,74	5,98
2003	1,79	7,86	3,93	1,52	4,08	1,35	4,00
2005	1,52	3,03	2,25	2,03	2,83	1,03	2,20
<i>Wartel/ Telephone Stall</i>							
2000	2,81	21,62	4,63	2,85	4,47	1,81	9,35
2003	10,44	39,51	11,38	10,24	16,54	3,75	19,56
2005	20,40	58,76	20,15	15,73	32,24	7,76	32,07
<i>Wamet/ Internet Shop</i>							
2000	0,47	1,46	0,61	0,39	0,57	0,29	0,80
2003	1,18	0,91	1,25	0,99	1,54	0,80	1,10
2005	0,60	0,59	0,87	0,44	0,88	0,44	0,62
<i>Kantor Pos/ kantor Pos Pembantu Post Office/Subsidiary Post Office</i>							
2000	3,95	5,02	5,38	6,40	4,70	3,02	4,65
2003	3,00	4,03	3,68	6,40	3,66	2,65	3,03

**Tabel Ap3. Percentage of Households that Accessed the Internet through Computer at Home by Province and Area Type, 2005-2006**

Provinsi/Province	Di Rumah/ Inside the house		Di Luar Rumah/ Outside the house					
			Warnet/ Internet corner		Kantor/ Sekolah Office/school		Lainnya/ Others	
	2005	2006	2005	2006	2005	2006	2005	2006
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nanggroe Aceh Darussalam	0.54	0.59	0.98	1.40	1.08	1.62	0.28	0.47
Riau	1.08	1.38	0.63	1.07	1.63	2.35	0.10	0.37
Kepulauan Riau	1.81	2.82	2.81	3.74	4.48	6.02	0.88	0.66
DKI Jakarta	5.81	6.26	4.98	8.23	7.48	11.03	1.14	1.58
Jawa Tengah	0.40	0.68	1.28	1.60	1.20	1.54	0.16	0.17
DI Yogyakarta	1.06	3.06	9.36	14.52	5.52	6.67	0.48	0.87
Bali	1.30	1.35	1.32	2.78	2.23	3.80	0.12	0.33
Nusa Tenggara Barat	0.27	0.35	0.86	0.62	1.01	0.74	0.34	0.24
Nusa Tenggara Timur	0.22	0.41	0.42	0.44	0.51	0.47	0.22	0.22
Kalimantan Timur	1.97	2.51	1.30	2.18	2.37	4.69	0.87	0.70
Sulawesi Utara	0.63	0.48	1.74	1.02	1.91	2.08	0.36	0.24
Gorontalo	0.62	0.59	1.29	1.13	1.50	1.11	0.62	0.20
Sulawesi Selatan	0.57	0.74	1.18	1.35	1.15	1.69	0.26	0.30
Maluku	0.20	0.63	0.46	0.61	0.34	0.54	0.08	0.05
Maluku Utara	0.63	0.21	0.73	1.01	0.50	0.86	0.11	0.09
Papua	0.65	0.22	0.46	0.60	1.05	0.95	0.13	0.32
<b>INDONESIA</b>	<b>0.99</b>	<b>1.19</b>	<b>1.56</b>	<b>2.11</b>	<b>1.81</b>	<b>2.43</b>	<b>0.29</b>	<b>0.40</b>



**Tabel Ap 4 Number of Villages Having Skilled Education Institution by Province and Type of Skilled Education, 2005**

Provinsi / Province	Komputer/ Computer	Montir Mobil/Motor Motorized Mechanic	Elektronik/ Electrical Mechanic
(1)	(2)	(3)	(4)
Nanggroe Aceh Darussalam	134	124	69
Riau	164	47	44
Kepulauan Riau	-	-	-
DKI Jakarta	165	56	35
Jawa Tengah	500	136	61
DI Yogyakarta	61	25	12
Bali	76	11	6
Nusa Tenggara Barat	106	14	16
Kalimantan Timur	116	32	19
Sulawesi Utara	59	30	23
Gorontalo	16	9	7
Sulawesi Selatan	153	36	31
Maluku	33	4	5
Maluku Utara	19	-	2
Papua	56	10	6
<b>INDONESIA</b>	<b>4,332</b>	<b>1,201</b>	<b>821</b>

**Table Ap 5 Percentage of Households Possessing Telephone, Handphone, and Personal Computer by Province and Area Type, 2005-2006**

Provinsi/Province	Telepon/ Telephone		Telepon Seluler/ Handphone		Komputer/ Personal Computer	
	2005	2006	2005	2006	2005	2006
	(2)	(3)	(4)	(5)	(6)	(7)
(1)						
Nanggroe Aceh Darussalam	5.98	5.43	16.01	20.75	1.62	2.01
Riau	10.11	7.29	27.67	33.95	4.24	4.70
Kepulauan Riau	22.93	17.89	53.94	52.79	5.93	7.05
DKI Jakarta	36.55	35.34	50.00	59.90	13.65	16.99
Jawa Tengah	6.98	6.07	17.42	21.64	2.20	2.77
DI Yogyakarta	13.14	14.63	39.14	46.57	10.68	15.74
Bali	17.14	15.27	34.13	42.03	4.55	5.76
Nusa Tenggara Barat	4.54	4.09	11.14	16.84	1.41	2.02
Kalimantan Timur	21.22	18.97	38.42	47.06	6.50	8.36
Sulawesi Utara	15.63	12.09	18.15	20.50	2.16	2.36
Gorontalo	6.66	5.29	9.61	12.06	2.14	1.63
Sulawesi Selatan	12.29	12.25	15.31	23.64	2.78	3.21
Maluku	10.61	7.82	9.71	14.72	1.61	2.30
Maluku Utara	6.70	4.56	10.48	13.06	1.91	1.92
Papua	12.00	6.14	14.71	15.74	2.30	2.07
<b>INDONESIA</b>	<b>13.10</b>	<b>11.20</b>	<b>19.94</b>	<b>24.60</b>	<b>3.67</b>	<b>4.36</b>

**Tabel Ap 6 Average Number of Households, Members Using Internet at Several Facilities by Province and Area Type, 2005-2006**

Provinsi/Province	Warnet/ Internet corner		Kantor/ Sekolah Office/school		Lainnya/ Others	
	2005	2006	2005	2006	2005	2006
	(2)	(3)	(4)	(5)	(6)	(7)
(1)						
Nanggroe Aceh Darussalam	1.7	1.5	1.7	1.5	1.4	1.8
Riau	1.5	1.6	1.2	1.4	1.2	1.6
Kepulauan Riau	1.6	1.4	1.4	1.5	1.6	1.5
DKI Jakarta	1.5	1.4	1.4	1.4	1.5	1.3
Jawa Tengah	1.2	1.3	1.2	1.2	1.6	1.1
DI Yogyakarta	1.2	1.2	1.1	1.3	1.3	1.1
Bali	1.2	1.3	1.3	1.4	1.6	1.6
Nusa Tenggara Barat	1.3	1.3	1.1	1.1	1.1	1.1
Kalimantan Timur	1.4	1.4	1.2	1.3	1.5	1.4
Sulawesi Utara	1.6	1.6	1.6	1.3	1.7	1.0
Gorontalo	1.4	1.5	1.4	1.4	2.3	1.2
Sulawesi Selatan	1.4	1.6	1.2	1.8	1.2	1.6
Maluku	1.7	1.3	1.4	1.6	2.3	1.0
Maluku Utara	1.2	1.3	1.1	1.5	2.8	2.2
Papua	1.5	1.4	1.4	1.2	1.7	1.0
<b>INDONESIA</b>	<b>1.4</b>	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>

Source Tables below ap2,ap3,ap4,ap5,ap6:

[www.itu.int/.../21.%20Availability%20of%20ICT%20Indicators%20for%20Households%20and%20Individuals-final.pdf](http://www.itu.int/.../21.%20Availability%20of%20ICT%20Indicators%20for%20Households%20and%20Individuals-final.pdf) accessed 18 August 2008